# DOCUMENT RESUME

ED 223 406 SE 039 192

| | |
|---|---|
| TITLE | The One Classroom School in Egypt: An Evaluative Study. Final Report. |
| INSTITUTION | International Development Research Centre, Ottawa (Ontario).; National Centre for Educational Research, Cairo (Egypt). |
| PUB DATE | 81 |
| NOTE | 303p. |
| PUB TYPE | Reports - Evaluative/Feasibility (142) |
| EDRS PRICE | MF01/PC13 Plus Postage. |
| DESCRIPTORS | Curriculum Evaluation; *Educational Assessment; Educational Objectives; Educational Research; *Elementary Education; *Elementary Schools; *Foreign Countries; Language Arts; Mathematics; *Nongraded Instructional Grouping; Program Evaluation; Religious Education; *School Organization; Science Education; Sciences; Student Attitudes; Teacher Attitudes |
| IDENTIFIERS | *Egypt |

## ABSTRACT

This is a report of a study designed to evaluate the one-classroom school in Egypt. The one-classroom school was designed for remote areas to provide compulsory education for children 6-8 years old and a new opportunity for education for those who dropped out or failed formal school. The schools were established in 1975-76 and the evaluation was conducted 5 years later. The study was designed to provide information on: (1) the current status of the schools, student learning, and selected variables related to the school environment and (2) ways to improve the performance and efficiency of the schools. The report is divided into seven chapters: (1) The Study and Its Scope; (2) Objectives and General Features of the One-Classroom School; (3) Methodology and Steps of the Study; (4) Realities of Material and Human Potentialities; (5) Learning Level of School Subjects; (6) Attitudes toward the One-Room Classroom; and (7) Summary and Recommendations. Recommendations consider current practice and ways to improve the curriculum, instructional materials, teaching, learning, and the school and community environment. (RH)

***********************************************************************
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
***********************************************************************

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED223406

ARAB REPUBLIC OF EGYPT
NATIONAL CENTRE FOR EDUCATIONAL RESEARCH
IN COLLABORATION WITH
THE INTERNATIONAL DEVELOPMENT RESEARCH CENTRE
(CANADA)

# THE ONE CLASSROOM SCHOOL IN EGYPT

## AN EVALUATIVE STUDY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
YOUSSEF KHALIL
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

## FINAL REPORT

1981

E 039 192

# TABLE OF CONTENTS

Page

Board of the Study .................................. -

Introduction, by the Minister of State for Education and Scientific Research .............. -

Introduction of the Study, by Dr. Youssef Khalil Youssef, Consultant to NCER ......... -

CHAPTER ONE : THE STUDY AND ITS SCOPE .............. 1-11

- Aims of the Study .............................. 3
- Terms and Limitation of the Study ............... 4
- Tools of Research .............................. 8
- Plan of the Study .............................. 10

CHAPTER TWO : OBJECTIVES AND GENERAL FEATURES OF THE ONE-CLASSROOM SCHOOL ............. 12-23

- Objectives of the One-classroom school .......... 13
- General rules for the establishment of the one-classroom school ................................. 14
- Some general indicators as regards the actual conditions of the one-classroom schools ......... 17

CHAPTER THREE: METHODOLOGY AND STEPS OF THE STUDY.. 24-64

- Building-up the research tools .................. 26
- The research sample ............................. 39
- Application of the research tools ............... 43
- Method of analysing the results obtained from the application of the research data ................ 52

CHAPTER FOUR : REALITIES OF MATERIAL AND HUMAN POTENTIALITIES OF THE ONE-CLASSROOM SCHOOL ............................ 56-91

- School premises ................................ 58

Page
- School equipment .................................... 63
- Curricula ........................................... 66
- Attendance and evaluation of pupils ................. 68
- Evaluation system ................................... 70
- Administrative and financial organization ........... 72
- Teachers' conditions and potentialities ............. 76

CHAPTER FIVE : LEARNING LEVEL OF SCHOOL SUBJECTS .. 92-168

- Learning level of religious education ............ 93
- Learning level of Arabic Language ................ 99
- Learning level of arithmetic and geometry ....... 116
- Learning level of science education ............. 136
- Learning level of social education .............. 148

CHAPTER SIX : DISCOVERING THE ATTITUDES TOWARDS THE ONE-CLASS SCHOOL .................... 169-234

- Constructing the instruments ..................... 170
- The samples of the research ...................... 171
- Findings of the questionnaire of the teachers' attitudes towards the one-class school .......... 173
- Findings of parents' attitudes ................... 182
- Findings of local leadership attitudes .......... 195
- Findings of pupils' attitudes ................... 205
- The over-all picture of the attitudes of teachers, parents, local leaderships and pupils towards the one-class school ............................. 221

CHAPTER SEVEN: SUMMARY AND RECOMMENDATIONS ........ 235-281

Summary :

- The subject and its importance .................. 236
- Objectives and questions raised by the research . 238

Page

- Method and procedures .............................. 239
- General results .................................... 243

Recommendations :

- Objectives and curriculum of the one-class school 260
- Textbooks .......................................... 266
- Teacher preparation and training ................... 267
- Financial and administrative organization ......... 274
- Evaluation ......................................... 279
- Looking ahead ...................................... 280

Bibliography ......................................... 282

-oOo-

# BOARD OF THE STUDY

## From the Ministry of Education

| | |
|---|---|
| - Mr. Mansour Hussein | Deputy Minister of Education |
| - Dr. Mohamed Abo El-Ela | Under-Secretary of Education for the Minister's Office. |
| - Mr. Hassan El-Harras | Under-Secretary of Education for Primary Education. |

## From the Faculties of Education

- Professor Dr. Roshdy Fam Mansour, Head of Psychology Dept., Girls' College, Ain Shams Univ.
- Professor Dr. Roshdy Labib, Professor of Curricula, Faculty of Education, Ain Shams Univ.

## From the National Centre for Educational Research

### -Experts:

| | |
|---|---|
| -Professor Dr. Youssef Khalil Youssef, Director of NCER. | |
| - Mr. Mohamed Al El-Hamshary, | First Researcher, NCER. |
| - Mr. Mohamed Gamal El-Din Nowair, First Researcher, NCER. | |
| - Dr. Philip Iskaros, | First Research, NCER. |

### -Associate Members

| | |
|---|---|
| - Mr. Mohamed Abdel Monem El-Kashef, | Director General of Experimentation. |
| - Mrs. Fathia Bazaraa | Director General of Statistics. |

### Researchers

| | |
|---|---|
| - Mrs. Fathia El-Bigawy,<br>- Mr. Abdel-Wahab Masoud<br>- Mr. Ali Ismail<br>- Dr. Mohamed El Kashef | (Arabic Language). |
| - Mr. Adham El-Saraf,<br>- Dr. Fawzy Elias,<br>- Dr. Mohamed El Batawy | (Science) |

- Mr. Mohamed Hozaien (Social Studies)
- Mr. Aziz Abdel Azim (Mathematics)
- Mrs. Shwekar Hashish (Evaluation)

### From the ALESCO

- Professor Dr. Adly Kamel, Science Expert, ALECSO

### Preparation and Editing of Final Report:

- Professor Dr. Roshdy Labib
- Professor Dr. Youssef Khalil Youssef
- Dr. Philip Iskaros

# INTRODUCTION

BY
DR. MOSTAFA KAMAL HELMY
MINISTER OF STATE FOR EDUCATION AND
SCIENTIFIC RESEARCH

Education is one of the basic needs of each individual in the society, as important as his need for food, shelter and health services. Unless the efforts are united to satisfy all such requirements, at least at their minimum level, sepecially among the economically and culturally less-favoured individuals, this will reflect negatively on education, and weaken its effectiveness.

If we ask about the minimum education that has to be provided in order that all individuals in the society may get the basic amount of values, morals, knowledge and practical skills that accord with the conditions of their varied environments, and enable them to be true citizens, an answer may be that, in most under-developed countries of the world, compulsory primary education - with its six grades in most cases - forms the basis of popular education through which equal opportunities are provided for all individuals. In some underdeveloped countries, compulsory basic education extends to eight or nine years, the first six of which form the first stage or cycle of that education.

In Egypt, the State has been keen, since the independence in the 1920's to include in the constitutions that were promulgated, starting from the 1923 Constitution until the 1971 Constitution, a statement that education in the first stage is compulsory for all children of the nation: males and females, and in urban and rural areas alike. However, the present Constitution (1971) has opened the way before extending this compulsory education to encompass other stages. It states that education is a right provided by the State, and is compulsory in the primary stage, and State works for the extension of compulsory education to other stages. This is what the State is planning at the moment so that compulsory education is extended to include the preparatory stage as well.

It is to be noted that the capacity for absorbing children within the Compulsory age did not exceed 46% of the total number of such children until the rise of the July 1952 Revolution. Thanks to the great efforts exerted by the State for the spread of education, the absorption ratio for those who reach the age of compulsory education has steadily risen until it has amounted to about 87% in 1979/1980. Thus, the total number of enrolled children in primary education has risen to about 4,300,000 boy and girl pupils.

Notwithstanding the quantitative growth in primary education, there are still about one million children of the age group 6-12 years who do not get any sort of formal education. Besides, a percentage that ranges between 12% and 15% of the total enrolments in the primary school drop out before they complete their education and hence, relapse to illiteracy. Such phenomenon is - in the first place - attributed to the social and economic conditions of students.

If the plan of the Ministry of Education is heading strongly for the realization of the complete absorption of the children within the compulsory age in the next few years, and with the conviction that the formal education apportunities will expand in the coming years, the possibilities that this kind of education will encompass such children as well as those who have not had educational apportunities before, will remain inadequate. Hence, the only way to face such a situation is that the educational authorities in Egypt attempt modern educational forms that are more flexible, and non-traditional, one of which is the "one-classroom school". It is a pattern of educational system parallel to formal education but has its own identity that makes it appropriate for local environments and their needs. The one - classroom school provides its services to groups of children at various age levels.

The idea of establishing one - classroom schools has emerged in 1975/1976 as a fitting formula of the education of children at the inhabited areas that are deprived of any educational service. It is a style for providing such children with the minimum education that is required for citizenship, as well as a means for complementing the role undertaken by the formal primary school in blocking the sources of illiteracy and providing educational opportunities anew for those who drop-out from the primary education.

Five years have now elapsed since the one - classroom school experiment has been started, during which it has spread in hamlets and small villages of the country, and the need has emerged to evaluate its conditions. In this respect, I have the pleasure to present to all those who are responsible for the educational process - in local councils, educational directorates and in the Ministry of Education - this research which has been undertaken by the National Centre For Educational Research in collaboration with the "International Development Research Centre" (which is affiliated to the Canadian Government). It has been founded on scientific and methodological bases, and on the actual lively conditions of these schools so as to identify the points of strength and weakness in them with the view of bettering education that they provide and making it possible for them to undertake their mission in accordance with what has been elaborated in detail in the recommendations at the end of this research.

On this occasion, I should like to convey my thanks and respect to all the colleagues, members of the research, from the Ministry first among whom is Mr. Mansour Hussein, Deputy Minister of Education; and from the National Centre for Educational Research, for the genuine scientific effort in this research work.

I thank - as well - the concerned authorities of the International Development Research Centre for the fruitful co-operation that was shown in all the steps of this research.

May God guide our steps.

Dr. Mostafa Kamal Helmy
Mostafa Kamal Helmy
Minister of State for
Education and Scientific
Research.

January 1981

# INTRODUCTION OF THE STUDY

BY

DR. YOUSSEF KHALIL YOUSSEF
CONSULTANT TO NATIONAL CENTRE FOR EDUCATIONAL RESEARCH

The absorption of children of the compulsory school age, at primary schools, as one way for blocking the illiteracy sources, seems to be an urgent cause to which the Ministry of Education had directed special attention in the last two decades.

Primary education has had an effective role in blocking sources of illiteracy. The illiteracy ratio in Egypt has come down from 76.2% in 1947 to 56.5% in 1976 (for individuals aged ten years and over and who fall within the age of production)(1). Still, the absolute number of illiterates is steadily rising due to the high annual rate of population growth (2.6% - 2.8%) and the quick rise in the number of children of school age and whose absorption in schools does not go in line with the rise in their numbers. The number of illiterates in 1947 was 10,393,272, and rose to 15.611.162 in 1976.(1) From hence emerges the relevance of designing and implementing strategies and plans of illiteracy elimination in a way that creates strong links between the spread of universal primary education on one hand, and the programmes of illiteracy elimination for youth and adults, on the other, in accordance with the recommendations of the General Conference of UNESCO held in Belgrade (September - October 1980).(2)

---

(1) Ministry of Education, Working Paper on Developing and Innvovating Education, 1979. pp. 24 and 49.

In its applied form, the idea of the one-classroom has emerged in 1975/1976 in accordance with the recommendation raised by the National Council for Education, Scientific Research and Technology, as one formula of the non-formal education.

It allows an apportunity for the education of children of the compulsory age (6-8 years) who do not find a formal school to join in their remote areas. It allows the chance to continue education anew for those who leave the formal school whether they are drop-outs or failures.

---

(1) Ministry of Education, General Directorate for illiteracy Elimination, Cairo, 1974.
- Central Agency For Public Mobilisation and Statistics, *Preliminary Results of the Population and Housing Census*, Cairo, November 1976.

(3) United Nations Educational, Scientific and Cultural Organization (UNESCO), General Conference, Twenty-First Session, Belgrade 1980, Document No. 21 M/5, para. 1384.

Five years have now passed since the one-classroom school has been established in most of the Egyptian governorates, and so it was thought fitting that the present research will answer two questions:

(1) What are the present conditions of these schools as regards the material and human potentialities, the learning level of the pupils in them, and the attitudes of teachers, parents, and local authorities, towards them.

(2) How is it possible to elevate the performance of the one-classroom school and raise its efficiency so that it can realise its aims, as aspired for.

This study, which has been undertaken by the National Centre For Educational Research in Collaboration with the International Development Research Centre which is affiliated to the Canadian Government, according to the directives of Dr. Mostafa Kamal Helmy, Minister of State for Education and Scientific Research. The study has some characteristics and trends that urge us to feel satisfied with the results that have emerged from it, and the recommendations that it raises. In the first place, this study applies the scientific method that is characterized by objectivity and precision, starting from the limitation of the scope of study, and through the preparation of research tools, selection of the representative sample of the one-classroom school in various governorates, then in the examination and application of these tools whether the tests or questionaires, and orienting them in the light of experimentations before using them as well as the analysis of results quantitatively and qualitatively under the guidance and supervision of two specialist professors:

- Professor Roshdy Fam Mousour, Professor and Head of Psychology Department, Girls' College, Ain Shams University.
- Professor Roshdy Labib Killini, Professor of Curricula, Faculty of Education, Ain Shams University.

In the second place, the present evaluative study is characterized by comprehensiveness and totality for; the objectives and levels of child learning, methods, means, problems, buildings, administrative and financial system, teachers and the society's attitudes towards the school, are all involved in the study. Thus, it has come out as a comprehensive study and it has become possible through the study, to reach a detailed report on the one-classroom school in proctice.

Thirdly, it is a field research undertaken by a great many researchers, and workers in the field all working as an intergrated team , and with its members having the same view of the objective that is concentrated round the promotion of the educational effectiveness of the one - classroom school so that it may undertake its mession in the desired form for the service of the communities that it has been established to serve.

Fourthly, the study has had a supervision board at the highest level under the chairmanship of Mr. Mansour Hussein, the Deputy Minister of Education, who has given the work vigorous pushes, and removed many obstacles that the study has encountered until it finally reached its designed goals.

Also, the research has benefited greatly from the attention directed to it by the responsible authorities at the International Development Research Centre. Mr. Salah Dissouki, Regional Director of the Centre in Cairo, Professor Kenneth King, Assistant Director of the Educational Research Programme (Ottawa, Canada), Professor Tunda Palmer, Regional Director of the Centre (Singapore) who followed - up various stages of the project, step after another, and even participated with the researchers of the NCER in the field visits to some sample positions of the one - classroom school at Fayoum Governorate.....

The study includes seven chapters:

- Chapter One deals with the scope of the research.
- Chapter Two deals with the objectives of the one - classroom school, its rise and genral features.
- Chapter Three deals with the methodology and steps of the study.
- Chapter Four deals with the haman and material potentialities of the one - classroom school.
- Chapter Five deals with the learning level of the pupils of the one - classroom school in the school subjects.
- Chapter Six attempts to identify the attitudes towards the one - classroom school.
- The last Chapter (Chapter Seven) includes summary of the study and some recommendations

May God guide our efforts.

Consultant to NCER

Dr. Yousef Khalil

Dr. Youssef Khalil Youssef

January 1981

# CHAPTER ONE

## THE STUDY AND ITS SCOPE

- Aims of the study.
- Terms and limitation of the study.
- Tools of research.
- Plan of the study.

# CHAPTER ONE

## THE STUDY AND ITS SCOPE

In its applied form, the one-classroom school came into being in 1975/1976 as a fitting formula for meeting the educational needs of children in remote areas with meagre population that are deprived of any educational services due to their remoteness from settlement areas and from formal schools; and where the number of children is too little for opening one formal school with its six grades. Such a school was though of as a style through which such children are provided with the minimum education necessary for a citizen, and as a tool to complement the role of the formal primary school in blocking the sources of illiteracy.

These schools have spread in Egypt until their number has reached 2521 schools in 1979/1980 encompassing 66.333 male and female pupils in the hamlets, and smaller rural divisions of 22 out of Egypt's 24 governorates.

## Aims of the Study:

The one - classroom school is considered an institution which is necessary for spreading education in the areas that are deprived of any sort of educational institutions as has already been mentioned. So far, five years have elapsed since such schools have been first established in Egypt. Hence, an urgent need is felt to evaluate their position on a scientific and methodological bases to identify points of strength and weakness in them with the view of bettering the education provided, and hence, enabling them to undertake their mission within the framework of the goals of the primary education in Egypt.

The accomplishment of such an aim has required the following:

(1) Study of the actual material and human potentialities of the one-classroom school.

(2) Identification of the learning level of the pupils of the school in the following areas:

a- Religious education.
b- Language skills (reading and writting).
c- Skills in arithmetic and geometry.

d- Scientific education.

e- Social education.

(3) Identification of the attitudes of teachers, parents to the pupils, local leaders and the pupils themselves towards this school.

Hence, through identification of the actual practice in terms of quality and quantity, it is possible to raise appropriate recommendations for bettering and improvement.

## Terms and Limitation of the Study:

For the above aims to be realized, it is necessary to define the implications of the terms used in this study in order to give the required scope.

- The one - classroom school:

x It is a school that encompasses male and female pupils belonging to more than one educational level, in the some place and taught by one teacher at the same time.

x It may be the case that one teacher for Arabic and another for arithmetic are found. Still, each of them teaches more than one level in one place and at the same time.

x The school may encompass one, two or three cycles, and each cycle includes two educational levels.

x In these schools, the courses set for primary education are taught including:

> Arabic, arithmetic and geometry, social studies, Science and hygiene, religious education together with other subjects such as home economics and agricultural education, provided that the potentialities required are available. Thus, such schools surpass the traditional "Kuttab " (derived from the Arabic verb which means "to write") which was associated with religious education, mastery of reading and writing for the service of the Holy Koran, traditions and Islamic Jurisprudence.

x The plan of study in such schools is 16 periods weekly of which 5 periods are allocated for Arabic, 5 periods for arithmetic and geometry, 4 periods for religious education and one period for each of scientific education and social education.

Educational Cycle:

x The first cycle encompasses the pupils who study at an educational level equivalent to grades one and two primary.

x The second cycle encompasses the pupils who study at an educational level equivalent to grades three and four primary.

x The third cycle encompasses the pupils who study at an educational level equivalent to grades five and six primary.

x Each of the one - classroom schools must have at least one of the three cycles.

The Mother School (school to which the one - classroom school is affiliated):

It is a formal primary school with six grades representing six educational years. In the school, more than one teacher are involved in teaching. The headmaster of the mother-school supervises the one - classroom schools near his school in the following:

- Supply with books and notebooks, some furniture that his school dispenses with: an old blackboard, some old seats ........ etc.
- He may be responsible as well for providing the pupils of the one - classroom schools with meals in case the mother-school applies the food system.

## The One - classroom School Inspector:

He is a primary school inspector who has started his career as a primary school teacher, then was upgraded to a headmaster then inspector. He supervises the one - classroom school teachers in addition to some formal primary schools. Some governorates, such as Fayoum, has provided special inspectors for the one - classroom school due to the special - type effort that such schools require.

## The Promotion Exam. at the One - classroom School:

It is the exam. held at the one - classroom school under the supervision of the headmaster of the mother - school, or one of the delegates with the aim of upgrading students from one cycle to the next.

The promotion exam. is held twice a year, the first in February, and the second in May. Thus, the one - classroom school differs from the formal schools in which the pupils are automatically up-graded in the add grades but after their success in the exams. at the end of the year in even grades.

Education at the primary stage in the mother - school, or the one - classroom school ends with the pupil's success at the Primary Education Certificate which is unified at the governorate level. Marking is made through the educational directorates to which a governorate is administratively divided.

## Tools of the Research:

### - Educational level tests

x For the purpose of this research, a set of tests has been applied to measure the educational level in the aforementioned case.

x In these tests, the explicit objectives were translated into operational objectives then into questions related with life situation's with no regard to the content of the school book.

x The aim of tests is not the success or failure of a student, or the reward or penalty of a teacher, but rather a tool to discover the educational level of pupils so that the interpretation of their results may lead to practical recommendations for the promotion of the educational level and the improvement of the educational process.

x Questions are graded so as to cover various educational levels in the three cycles.

x The question that is not answered by a pupil is not eliminated for the aim is not to put questions for differentiation. The aim is rather to search for the causes behind such inability to give an answer that realizes the educational objective. This helps the avoidance of such case in future so that education may be bettered.

### - Assessment Card for the Identification of Attitudes:

It includes items that are stated in a linguistic form in a way that refers to the extent to which the respondent accepts or refuses the one - classroom school and the roles that it undertakes so that the line of such schools may be oriented in the direction that elevates their educational efficiency.

### Major questions raised by the study:

Building upon the above - mentioned concepts and tools that are especially designed for it, the research attempts to give an answer to two major questions:

Firstly: The present position of the one - classroom school in so far as its material and human potentialities are concerned, in addition to the educational levels of its pupils, and attitudes of teachers, parents local leaders and pupils themselves towards it.

Secondly: How can the performance of the one - classroom school be elevated and potentiality be made more effective for the realization of its objectives?

These two major questions spring from an agreement that objective conditions necessitate that such type of schools will be maintained for a period of time that may extend until a better formula may be introduced for better spread of education among meagre population settlements that are deprived of all educational services at the present time.

## Plan of Study:

In the light of what is stated above, the following steps have been taken to answer the two questions of the study:

1- Definition of the philosophy and aims of the school.
2- Building tools for the measurement of what has been realized of these aims as well as the identification

of the forces influencing such realization.

3- Application of tools on a representative sample of the one - classroom schools.

4- Analysis of tools' data with the aim of answering the first question that is concerned with estimating the present position of the one - classroom school.

5- To get visualizations with the aim of giving an answer to the second question related with the ways of raising the efficiency of the one - classroom school in realizing its objectives in the light of the factors that have an effect on the role of such school.

The items included in this plan will be dealt with in detail in the following chapters.

# CHAPTER TWO

## OBJECTIVES AND GENERAL FEATURES OF THE ONE-CLASSROOM SCHOOL

- Objectives of the one - classroom school.
- General regulations for the opening of the one - classroom school and putting plan of its work.
- Some general indicators from the actual conditions of the one - classroom school.

# CHAPTER TWO

## THE ONE - CLASSROOM SCHOOL AND ITS GENERAL FEATURES

In the previous chapter, reference is made that the establishment of the one - classroom school has emerged as a solution for the settlements with meagre population who are deprived of educational services due to their remoteness from formal primary schools and where it is difficult to build any school as for the very little number of children within the compulsary school age. As a starting point for the evaluation of this school, which is the subject of the present study, we deal - in some detail - with its aims, the role it is assumed to undertake, rules of its establishment as the framework of the evaluation process. This is what we attempt in the present chapter.

### Aims of the One - classroom School:

The one - classroom school was first established in 1975/1976 according to a recommendation raised by the National Council for Education, Scientific Research and Technology so that it might contribute to the realization of the following aims:

(1) Allowing a chance for educating the children within the compulsory age (6-8 years) and in whose area there is not any formal school.

(2) Allowing a chance for the formal school leavers whether failures or drop-outs for various causes especially the remoteness of their school, and accordingly the difficulty to attend a school regularly.

This means that the broad aim of establishing the one - classroom school is the contribution to blocking the illiterocy resources in Egypt.

Some general rules for the establishment of these schools and their plans of work:

- The National Council for Education, Scientific Research and Technology put general rules to be followed in the establishment of these schools, and for the realization of the aspired aims. Of these are the following:(1)

- That the efforts of the State should be united with the self - efforts of the people in building and furnishing those schools, equipping them overcoming problems and elevating their educational efficiency.

---

(1) Report of the National Council for Education, Scientific Research and Technology (Cairo: National Specialized Councils, Fifth Session, October 1977 - July 1978). pp. 187 - 206.

- In the establishment of these schools, priority is to be given to remote areas with meagre population that are deprived of educational services.

- Such schools are to be attached to formal schools (or the one whom he delegates) supervises the work at the one - classroom school. It is allowed that a pupil at the one - classroom school is transferred to a suitable grade at the mother - school if his educational level at the one - classroom school reaches a certain extent, and if means of transport is available for him.

- Getting the retired teachers' help whenever it is possible, together with other types of teachers, and all must be trained on the nature of the work at the one - classroom school.

- Good financial rewards are to be given to all those who work for the one - classroom school including supervisors, teachers, headmasters of mother - schools, so that this may be an incentive for good work.

- Learners at the one - classroom school are divided into three cycles:

x The first cycle stands for the first and second grades of the primary school.

x The second cycle stands for the third and fourth grades of the primary school.

x The third cycle stands for the fifth and sixth grades of the primary school.

Transference from one cycle to the next is made according pupil's success at an examination held at every school under the supervision of the mother school in February and May of each year.

x School books of the formal primary education are temporarily used. Plans for writing special graded books for such schools are to be made. Writing such books is made in the light of field experiments in such schools.

x Meals are provided to pupils of these schools especially at the governorates in which pupils of the formal primary schools are provided with meals.

## Some general indicators as regards the actual conditions of the one - classroom schools:

In the light of the above rules, the Ministry of Education made a plan for the establishment of 1000 schools annually for five years. The plan was started in 1975/1976 until 1979/1980.

However, quantitatively, only 50% of the plan could be executed as is shown in the following table:

Table 2.1

Showing the growth in the number of the one - classroom schools and their pupils from 1975/1976 to 1979/1980.

| Year | No. of schools | No. of pupils |
|---|---|---|
| 1975/1976 | 868 | 25899 |
| 1976/1977 | 1434 | 47722 |
| 1977/1978 | 1845 | 61267 |
| 1978/1979 | 2212 | 61313 |
| 1979/1980 | 2521 | 66333 |

The incapability of quantitatively executing the proposed plan is attributed to the following:

(1) Difficulty in getting a teacher who accepts to work at P.T. 20 for each period he teaches, and with a maximum of 70 periods monthly.

The school of Ezbet Abdel-Baky in Fayoum Governorate may be taken an example for this. For four years (from 1975/1976 to 1978/1979) education was going on successfully and effectively, but the school was closed on 1979/1980 when its teacher was transferred to an Arab Country, and a substitute who accepts the modest salary could not be recruited.

(2) Difficulty to get a suitable place that allows the chance for the continuation of the educational process without cease:

- In case of Mosques, children have to be evacuated at times of worship.
- If the school is held in a shop or a room in a house, it is often closed whenever social or economic problems arise between the teacher of the school and the landlord of the place.
- Halls in big houses (El-dawar) has to be evacuated of all pupils on the occasion of marriage or death.

(3) Some of the local authorities did not give due attention to this type of schools in terms of material potentials and the solution of transport difficulties.

Whatever might be the causes, the people of Egypt are keen on education, a matter that has been proven by the results of the questionnaire that will be elaborated in detail in the next chapter, and which shows how a sample including parents and local leaders welcomed the opening of the one - classroom school.

In accordance with the recommendations of the National Council for Education, Scientific Research and Technology, the Ministry of Education made an evaluation of the conditions of these schools two years after their establishment, i.e. by the end of the year 1976/1977, and a report was made including many points, among which are the following:

- 1434 schools were established throughout the two years while it was supposed that 1000 should have been established each year. This is due to the difficulty to find a suitable place to be hired for the schools, and the difficulty experienced in getting a teacher for the school.

- Such schools encompassed, at that time, 47.722 pupils (with a density of 33 in each school), of which 28.029 were of the non - absorbed children by primary education at a percentage of 58.7%. Leavers (drop-outs, and failures) were 15.827 or 32.2%. Illiterates were 3866 forming 8.1%.

- Even in the case of qualified teachers, there is the difficulty of teaching to three cycles at the same time and in the same place. Such difficulty may be due to lack of training among the one - classroom teachers on the type of work required in these schools.

- The study plan with its 16 periods weekly does not allow enough time for the absorption of the courses designed for the formal schools and which require between 26-32 periods weekly according to the grade.

- A need was felt to reconsider the school books so that the material they include is on the one hand related with the local environment, the implications are appropriate for pupils' potentials and school subjects are integrated together.

- The schools fall short even of the minimum equipment which is essential for education, apart from the difficulty that the supervisors practise to reach such schools. This affects the educational process in matters of regularity and development.

Whatever might be the drawbacks of the present conditions of these schools, a fact that cannot be denied is that they render a service to one section of the Egyptian society living in local environments totally deprived of educational services. Besides, they spread in 22 of the 24 governorates of Egypt as is shown in the following table:

Table 2.2

Showing the spread of the one - classroom school in various governorates

| No. | Governorate | No. of schools 1979/1980 | No. of pupils 1979/1980 |
|---|---|---|---|
| 1 | Alexandria | 19 | 577 |
| 2 | Damanhour | 255 | 6170 |
| 3 | Tanta | 300 | 6861 |
| 4 | Kafr El Sheikh | 123 | 3688 |
| 5 | Shebin El Kom | 39 | 906 |
| 6 | Banha | 106 | 4452 |
| 7 | Mansoura | 48 | 1326 |
| 8 | Damietta | 48 | 1219 |

Table 2.2 (Cont.)

| No. | Governorate | No. of schools 1979/1980 | No. of pupils 1979/1980 |
|---|---|---|---|
| 9 | Zagazig | 196 | 3243 |
| 10 | Port Said | 10 | 349 |
| 11 | Ismailia | 40 | 800 |
| 12 | Suez | - | - |
| 13 | Giza | 59 | 1463 |
| 14 | Fayoum | 411 | 10577 |
| 15 | Beni Suef | 353 | 9239 |
| 16 | Minia | 230 | 7305 |
| 17 | Assuit | 47 | 1418 |
| 18 | Sohag | 80 | 2082 |
| 19 | Quena | 101 | 2907 |
| 20 | Aswan | 11 | 273 |
| 21 | Matrouh | 38 | 1374 |
| 22 | El-Wadi El-Gedid | 6 | 68 |
| 23 | Red Sea | - | - |
| 24 | Sinai | 1 | 35 |

Now, that we have displayed the rise, aims and some general features of the one - classroom school based on its present quantitative condition, it may be possible that we deal with the qualitative evaluation of the school which is the coherent task of the present study. This is the subject of chapters three and four.

# CHAPTER THREE

## METHODOLOGY AND STEPS OF THE STUDY

- Building-up the research tools.
- The research sample.
- Application of the research tools.
- Method of analysing the results obtained from the application of the research tools.

## CHAPTER THREE

## METHODOLOGY AND STEPS OF THE STUDY

The previous chapter has shown that the basic aim of the one-classroom school is to allow a chance for the education of children within the compulsory school age, and who cannot find any formal school within their reach; together with allowing a chance for some leavers of the formal primary school to continue their education. To evaluate the extent to which this school has, quantitatively and qualitatively realized this aim, it is necessary to carry out a study based on the actual position so that such a school may be developed on an objective basis. Tools of such a study have to be related with the partial operational objectives in each aspect that is concerned with education at the formal primary school which the one-classroom school follows.

As it is impossible at the present time to afford the application of research tools on all the one - classroom schools that have spread in remote areas, a representative sample has to be selected in order to give the results based an the actual conditions with the negative as well as positive aspects.

The present chapter displays ways of putting this into practice starting from the building-up of research tools; through the sample selection, the application of tools and then the method of analysing the data obtained from the application of the research tools.

## Building-up the research tools:

The research tools include four groups of cards, tests and questionnaires as follows:

- Cards for the evaluation of the present conditions of school and the teacher, they are three in number.
- Tests for the measurement of the level of pupils' learning, they are four in number.
- Questionnaires for the identification of the attitudes of teachers, parents, local leaders and pupils they are four in number.

The following is data on what is included in each of the four groups.

## Building-up the evaluation cards of the present conditions of the one - classroom school:

This has required the design of three cards:(1)

1- Card for the identification of the one - classroom school.
2- Card for the estimation of the conditions of the one - classroom school.
3- Card for the estimation of the teacher's present conditions.

The aim of the first card is to identify the features of the one - classroom school, the extent to which it has spread, and the extent to which it undertakes its assumed role from the point of view of supervisors, and the Department heads who supervise such type of schools.

As for the aim of the second card, it is to improve the actual conditions of the one - classroom school in terms of:

1- building
2- furniture and school equipment.
3- enrolment and attendence of pupils.
4- role of technical supervisors as it actually is at the present time.

---

(1) See Appendixes No. (1), (2) and (3).

The aim of the card of the estimation of the teacher's present conditions is to identify:

- The level of his professional, scientific and cultural qualification.
- The extent to which he is whole - time devoted to his work.
- His monthly income from the school and from other sources.
- The location of his residence and its distance from the school.
- The training programmes that he has attended.
- The extent to which he is trained to teach more than one level at a time and under the same roof.

To realize these aims, the research team made an initial design of the three cards then these were revised through two actions:

The first: by holding a workshop that encompassed a number of experts to discuss the initial form of the cards and the proper modifications that they suggest.

The second: by performing a small-scale pilot study which resulted in other modifications of the wording of the cards.

Thus, the three cards finally became in the applicable form.

The first card was applied in November 1978 on (38) supervisors and department heads representing (12) governorates from the Northern and Southern Egypt, as has already been mentioned - during their participation in a training course on the difficulties encountered by the one - classroom school, and ways of overcoming them. Data of this card has helped in defining the terms of the research and in the selection of the sample.

As for the two other cards which are concerned with the evaluation of the conditions of the school and its teachers, they were applied to a sample of forty selected schools then the results were analysed as is shown in chapter three.

Building-up tests for measuring the level of pupils:

The research gives attention to learning in five basic fields:

(1) Religions education.

(2) Arabic language (reading and writing).

(3) Arithmetic and geometry.

(4) Social education.

(5) Science education.

Although each of these fields is characterized by certain character and features, which were taken into consideration when putting the tests which will be dealt in the next chapter, the research team put one plan including some general principles that are followed in the building-up of tests for the measurements of the learning level of pupils.

The plan was put on the assumption that the achievement tests put by the educational directorates are not suitable for the realization of the aims of the research. The aim of this research is to evaluate the school with the view of bettering the education it provides. Thus, it will not be attained unless the learning level of its pupils as regards the desired goals, is identified, then work is possible for the steady development of this level. On the other hand, the aim of the achievement tests is to state the success or failure of a pupil in one school subject or more, which makes the evaluation process concerned with the announcement of the examination results. Besides, their questions do not cover all the aims that are required for realization, and most of the questions are not characterized by objectivity.

From hence, rose the relevance of designing tests for the measurement of the pupil's learning so that these tests may be closely associated with the research questions. The research questions as previously stated - evalue round raising the efficiency of the one - classroom school, the only open window for education and acculturization in its environment.

Although the following chapter will deal in detail with the structure of each test it is, nevertheless important to give general examples that give a comprehensive view of these tests.

(1) Religious education:

If the aim of religious education is that the pupil feels that the religious phenomena are the basic drives of his behaviour, then the pupil is not asked directly on religious education, as he will express what he has learnt by heart. Such questions were, hence, dispersed, throughout the tests of school subjects in order to identify the extent to which religious education pervades the student, and thus we could define his real learning level.

## (2) Arabic Language

If the ultimate ends of learning the Arabic language, for example, is that the pupil by the end of the third cycle, i.e. the completion of the primary grades, is able to read and assimilate a news item in a newspaper, write a letter to the manager of one, co-operative society in the village, the level test must be graded. It has to start with the identification of the letters, then the word, the sentence and at last the discussion of a written news item in the same letter size of newspapers, or make him write a letter to one of the village authorities requesting to be employed, or that a certain problem be solved.

On studying the test results, we define the learning lovel that pupils have reached, and explain reasons for his stopping at that level, how we can elevate such a level in future, and how to attain better level with the minimum effort and costs and in the shortest possible time.

## (3) Arithmetic and geometry

If one of the ultimate ends is that the learner - having completed the primary stage - is able to count the multiple interest of a co-operative society, to imagine a piece of land that he intends to buy or work on, examine the saving channels that best suit his case, then the test must be affected by figure discrimination and performance of the four arithmatical processes, then up in level until he reaches the final arithmatical problems on shares and bonds, interest, saving, purchase of a specific area of land. Also, geometry starts with the identification of the square, the circle, the triangle as well other geometrical shapes, and end with the drawing of these and the identification of their scientific traits.

When examining the results of these tests, it does not greatly concern us whether a certain pupil has succeeded or failed to solve one or two problems or exercises. It is rather that we identify the level of pupils' learning at each cycle, interpret their inability to exceed a certain level with the aim of getting hold of the factors that allow the control of the educational process in future to the extent that it benefits in raising its efficiency.

### (4) Social Education

If one of the ends is that the learner recognises the Arab belongingness, then graded questions are worded to discover the extent of his belongingness to his local environment in the small village, then his governorate, then his country Egypt, then the Arab Nation. If the results of the level test show that, by the end of the third cycle, the pupil is unable to exceed the level of the questions that are related to his local environment, then there must be reasons for this. If these reasons, whether they are concerned with the school book, the teacher, the plan of study, or a method of teaching,are identified, then these will be dealt with by the research together with suggestions about means of betterment and improvement.

## (5) Science Education

If one of the ultimate ends is that those who complete the primary stage are capable of cause and effect interpretation that link phenomena together, then graded questions have to be worded on, say, microbes starting with an identification of the extent to which the learner accepts the notion of washing fresh vegetables before eating them. Then, a higher level question is given to discover the pupil's idea about making a dress to simple bleed, then to a higher question that asks about his awareness of the connection of disease with an objective cause, i.e. microbe.

Such graded spiral questions for the measurement of one aim reveal the extent to which the pupil's learning has reached. This will help in future plans for the betterment of science and health education in the light of what the factors affecting the level of education may reveal.

In the light of this general framework that takes the edicometric norm (the one that takes educational objectives as the basis for measurement) the following steps were followed in the building-up of tests:

1. Defining the top level that a learner may reach by the end of his primary education in any field of the above four ones.

2. Putting stage operational objectives which are graded and begin with the level of new entrant to education up to the level of the primary school certificate which is reached by the end of the third cycle.

3. Translating operational objectives into questions that are characterised by objectivity whenever it is possible. Questions that require free expression are confined to the aspects that cannot be measured except through this type of questions.

4. Performing a pilot experiment for the objective tests in the two schools:

   a) One - classroom school[*]

   b) One formal primary school[**]

where, in one - classroom school, thirty boy and girl pupils were put, ten of which were from grade two primary, ten from grade four and ten from grade six.

5. In the light of the two pilot experiments, and according to conclusions from the discussions with pupils which were made by participants in the design and refinement of the tests, the tests were finally put in their final form as is shown in the appendixes.(1)

It is noteworthy that the choice of content of these tests was basically made in the light of the following:

1- Attending to the functional concepts that the pupil meets in his life whether he withdrew from education or continued.

---

[*] Bain El-Bahrain one-classroom school which is affiliated to Giza Educational Directorate, The school is situated southern of Cairo.

[**] Alam El-Din primary school which is affiliated to West Cairo Educational Directorate.

(1) See Appendixes: Reading Test - Appendix No. (4). Writing test, Appendix No. (5) - Arithmetic and Geometry test, Appendix No. (6) - Science Education Test, Appendix No. (7) - Social Education Test, Appendix No. (8).

2- Attending to academic concepts in the narrowest scale and whenever there is utmost urgency for this.

3- Revealing the extent to which the pupil is able to take decisions in the light of objective information.

## Building-up the questionnaries for the identification of attitudes:

The need for such tools was felt in order to identify the pathway by which the effectiveness of the one - class-room school may be supported. Attitudes of the school teachers, parents, leaders of its local environment, and its pupils themselves are among the effective conditions for raising the future effectiveness of these schools. Besides, these tools give indicators that help in giving answers to some of the research questions, especially in so for as the following aspects are concerned:

(1) How the importance of this school is visualized, and the extent of the belief in the need for its existence.

(2) The extent to which its daily routine - work and system throughout the year are acceptable.

(3) The extent of the belief in the fruitfulness of its curricula in terms of the limited concept within the school, and the borader one that encompasses life within and outside the school.

(4) The extent of the visualization of the nature of human relations within the school.

As the next chapter will display the steps of building - up these questionnaires, some statements were put to reveal the attitudes of the respondents so that every group of statements evolves round one area and is closely associated with the questions and aims of the research.

Then a pilot experiment was performed in one of the one - classroom schools[x] and in the light of the results of this experiment, the statements were refined.

The pilot experiment was then performed another time with other undividuals from the same village and the questionnaires were refined for the last time, and hence became applicable for:

(1) The teachers.

(2) The parents.

(3) The local leaders.

(4) The pupils.

---

[x] Bain El-Bahrain school referred to previously.

x See Appendixes No. (9), (10), (11) and (12).

Sample of the research:

Table No. (2.2) in the previous chapter has shown that 2521 one-classroom schools in the Arab Republic of Egypt distributed over (22) governorates according to the 1979/1980 statistics. Such schools vary according to two basic aspects :

(1) Educational cycles in the school

- Some schools have three cycles and have educational levels equivalent to the six or the first five grades of the formal primary school.

- Some schools have two cycles and have educational levels equivalent to the first four or three grades of the formal primary school.

- Some schools have one cycle, and have two educational levels equivalent to grades one and two of the primary schools.

- A school may be found with one cycle equivalent to one educational grade at the formal primary school, Such schools were excluded from the study as the definition given to the term, and which defines such schools as having at least two educational levels under the same roof, and taught by one teacher at a time, is not applicable in their case.

(2) Level of Teacher qualification and training

- In some schools is found a teacher with an educational qualification.
- In some schools, the teacher has got a school certificate but has not got an educational qualification.
- In some schools the teacher has got neither a school certificate nor an educational qualification.

For more identification of the conditions of these schools before choosing the sample, the research board got the chance of a meeting held for the educational leaders responsible for the supervision of the one-classroom schools in November 1979 at the Central Training Administration Manshiet El-Bakry, Cairo, and introduced the identification card of the one-classroom School.(1) Resources, were obtained from thirty eight supervisors and department heads representing (11) governorates: Aswan, Quena, Asiut, Minia, Fayoum, Qualiobia, Monofia, Damietta and Beharia.

In the light of the data obtained from their cards, as well as from the discussions with them, and the information from the Ministry of Education documents, a representative sample of the one-classroom school was chosen taking the following into consideration:

---

(1) See Appendix No.(1).

a. Variety of the number of cycles in the chosen schools.

b. Variety in the qualification level of their teachers.

c. Variety in the environments served by the chosen schools.

Table 3.1 shows the sample of the different schools chosen. Their number is (40) schools of which (12) schools were in Lower Egypt governorates (Qualioubia, Monoufia, Tanta and Beharia); and of which (28) schools were in Upper Egypt governorates ( Fayoum, Minia, Assiut, Sohag, and Quena).

## Table 3.I
### Shows the sample of different schools

| Type of the one-classroom school | Teacher is qualified and has previously worked in education | Teacher has got a general qualification but has not worked previously in Edu. | Teacher has got no qualification | Schools with undefined status of teachers |
|---|---|---|---|---|
| Three-cycle school | (1)Arab El-Hamamsha Al Ahraz/Shebin El-Kanater/Qualiobia. | | (2)Nage Badary of western Zora, Sohag | |
| Two-cycle school | (3)Ezbet Abdel Sabour school, Faraza,Kousia, Asiut.<br>(4)El Kalzam school, Shebin El Kanater, Cualiubia.<br>(7)El-Karia El-Thaltha,Tamia,Fayoum.<br>(8)El-Shawazla El-Kabira/El-Shawazla El-Mensha, Sohaj.<br>(9)El-Shawazla El-Saghira/El-Shawazla El-Talimia,El-Minsfa, Sohaj. | (5)Al-Ashraf,Balana,Aswan.<br>(6)Al-Sadat, Balana,Aswan. | (10)El Wastania,Tamia,Fayoum<br>(11)Mahmoud Abdel Baky, Tamia, Fayoum.<br>(12)El-Dokary,Tamia,Fayoum.<br>(13)El-Sawohlia El-Gharbia, Abnoud, Quena.<br>(14)El-Sawahlia El-Sharkia, Abnoud, Quena.<br>(15)Sheraidah Than,Mahmoudia,Behaira.<br>(16)El-Kolka,Amaida,El-Shawodfa,El Mensha,Souhaj.<br>(17)El-Gawanib El-Shawazla, El-Minsha, Souhaj. | (18)Ezbet Riad, El-Mehala Elkobra.<br>(19)Ezbet El-Khazan,El-Mehala, El-Kobra.<br>(20)Benofer,Kafr El Zayyat. |
| One-cycle school | (21)Tahfeez El Minsha, Sohaj.<br>(22)Ezbet Gorgy,Kafr Hamza,El-Khanka, Qualioubia.<br>(23)El Megahdeen Rabe, Abou Hammos, Behaira.<br>(24)Sandrina;Than, El-Mahmoudia, Behaira.<br>(25)El-Khamseen one-classroom school, Monouf 4,Manouf. | (26)Gezirit El Noghmees, Tamia, Fayoum.<br>(27)Karbuy,Toukh El-Khail, El Minia.<br>(28)El-Dababeen,Taukh El-Khail,El Minia.<br>(29)Zaki-Kism I,Atsa,Fayoum.<br>(30)Sedawy-Kism I, " " .<br>(31)El-Kom El-Asfar, Kism I, Atsa, Fayoum.<br>(32)El-Haddadin,Tamia,Fayoum.<br>(33)Abo Khatra,Kism I,Atsa, Fayoum.<br>(34)El-Nage El Thaiith,Hosh Eisa, Behaira. | (35)Abdel-Al Mahmoud,Tamia, Fayoum.<br>(36)El-Khori El-Baharia, Kism I/Atsa.<br>(37)Ezbet Soadoni, Tamia, Fayoum.<br>(38) Morad Gindi, Tamia, Fayoum.<br>(39)Sayed Ahmad,Tamia,Fayoum.<br>(40)Meyag Than, Idko,Behara. | |

When choosing three villages as case studies to know the conditions and role of the one-classroom school, the following villages were chosen :

(1) Noge El-Haddadin as a model of a small village that enjoys economic flourish and most of its inhabitants are land-owners who cultivate fertile land.

(2) Nage El-Dokari as a model of a small village which is economically poor and is isolated from sellements by barren land and public drain.

(3) Nage Mohamoud Abdel-Baki as a model of a small village whose people live in grinding poverty. Although the school is situated in a fertile area, the majority of its people are workers who prefer to employ their daughters as servants in houses in stead of education. For this, not any girl within the age-group can read and write in this village.

## Application of the Research Tools :

Every tool of the ones stated previously was applied in the style that suits the aim which it serves :

## Firstly: Identification Card of the One-Classroom School

The research team, as already stated, got the chance of distributing the identification card of the one-classroom school in November 1979, over a number of educational leaders responsible for the supervision of the one-classroom schools. Twenty-eight of them filled the card on behalf of (348) one-classroom schools belonging to (11) governorates covering North and Southern Egypt as follows:

1. Lower Egypt governorates : Qualioubia, Monoufia, Dakahlia, Damietta and Behaira.
2. Upper Egypt governorates : Fayoum, Minia, Asuit, Souhag, Quena and Aswan.

The data was processed and studied at a time other research tools were being built up and so helped in giving precise qualities of the sample apart from definition of the terms of the research and its scope.

## Secondly: Tools directed to pupils

The research teams responsible for field application of the research tools were trained during February 1980 by explaining aims of the research, objectives of each tool and how to apply it in accordance with the regulations stated in the following chapter and in the Appendixes, before any tool was explained.

Governorates that have one-classroom schools were notified to get ready to meet, at a certain specified date during March 1980, a team of two. The following have to meet the team at the school :

(1) The school pupils.
(2) The school teacher.
(3) The supervisor and the department head responsible for the follow-up of work at the school.
(4) Three leaders of the local community such as the village head (umda), or the Sheikh, the Koran reciter of the village ...etc.

The team consisted of two, of whom one at least had participated in building-up the research tools or workers in the research. One of the two was to apply the research tools directed to the pupils while the second will, simultaneously, apply the tools (other than the ones directed to pupils), i.e. the card of school conditions, teacher's status and the questionnaires for the identification of the attitudes of teachers, parents and local leaders).

As the required data in the measurement of learning Arabic (reading and writing), arithmetic and geometry, science education, and social education is identical for the same person, these were only to be filled once and in the test of "social education" by the researcher and the school teacher.

As for the other tests, it was sufficient to record cipher figure in three squares as follows :

| School Number | Pupil Number | Cycle in which pupil is enrolled |
|---|---|---|

Hence, every school was given a certain number starting from I and until 40. Every pupil was given a number according to the list of names and which starts with those enrolled in the first cycle, then the second cycle then the third cycle.

The pupil who is enrolled in the first cycle had the number (1) written against his name.

The pupil who is enrolled in the second cycle had the number (2) written against his name.

The pupil who is enrolled in the third cycle had the number (3) written against his name.

- The researcher talks to the pupils for ten minutes stating that what is required is to elevate the school and improve the service provided to them. He affirms as well that the test will lead neither to success nor to failure. However, every one who answers as precisely as he can will be given a box of biscuits or a piece of chocolate.

  It actually happened that, by the end of each test one biscuit box, or a piece of chocolate was given to each pupil as an incentive to answer with the greatest possible precision.

- The researcher starts the application with the "Social education" test. He reads the sentences one after the other in clear voice and intonation, and asks them to put the mark ( ✓ ) against the statement which, they think, is correct, and the mark ( X ) against the statement which, they think, is wrong.

The researcher was to make sure that the questions cover all cycles and that the younger pupils will not get bored when they fail to answer some questions. The pupils were asked not to make any mark unless they are sure of the answer.

After the end of the test, the researcher collected the answer papers, distributed sweets over the pupils, then distributes the papers of the science education test.

- After that, the tools, directed to the pupils are stopped, and the teacher is asked to explain one lesson for a quarter of an hour so that the researcher will identify his method of teaching to more than one educational level at a time and under one roof. This helps in elevating the teacher when filling the card which is especially designed for this as will be shown later.

- Then the pupils will have one quarter of an hour break.

- After the break, the reading test is applied followed by the writing test then the arithmetic and geometry. The researcher explained the idea behind the test as will be shown in the following Chapter - then leaves the pupils to answer allowing them an open time, and encouraging them to continue, and try to give the most correct answer possible.

- After the end of the tests for the measurement of the educational level, which normally took three hours at the one-classroom school, the researcher kept about ten of the oldest pupils enrolled at the school provided they are likely to read and write well. He distributes over them the questionnaire (Attitudes of the pupil towards the one-classroom school). He explains to them its idea of the questionnaire and reads its items one after the other slowly and in clear intonation. He asks them to put the mark ( ✓ ) before the answer (I agree), or (I do not agree). Hesitant answers are excluded.

Thirdly: Tools other than the ones directed to pupils

- Simultaneously, while the pupils inside the classroom are with the first researcher, the second is engaged in the interview of parents and local leaders individually, changing the questionnaire into an interviewing schedule whenever the respondent is illiterate. As for those who master reading and writing, they are asked to put ( ✓ ) before the statement (I agree) or (I do not agree). Hesitant answers are excluded.

- After the tools concerned with the attitudes of parents and local leaders have been filled, the teacher will have provided the required aid to the first researcher in writing the lists of the attending pupils and the personal data about them. Hence, the teacher fills the questionnaire of the teacher's attitudes towards the one-classroom school, and the evaluation card of the school's condition, and some information concerned with the teacher himself.

## Fourthly : Tools used in the Mother-school

- So that the picture of the learning level of the pupils of the one-Classroom school may be comparable with the learning level of the formal school pupils. learning level tests were applied to pupils from the mother-schools to which some of the one-classroom schools involved in the present study are attached.

- The research team evacuated one of the classrooms (in each of the chosen schools), and gathered in it thirty of the school's pupils so that 10 are from grade 2, 10 from grade 4 and 10 from grade 6.

- The same method for the application of tests of educational level in the one-classroom school was applied.

**Fifthly** : Total number of the sample on whom the research tools were applied :

The sample of pupils on whom the level tests were applied amounted to (1008) pupils as in Table 3.2.

Table (3.2)
Shows the number of pupils on whom the learning level tests were applied

| Cycle | One-classroom school | Mother-school | Total |
|---|---|---|---|
| First | 430 | 50 | 480 |
| Second | 339 | 50 | 389 |
| Third | 89 | 50 | 139 |
| Total | 858 | 150 | 1008 |

Method of analysing research data:

The school workshop considered that the statistical treatment must function in the service of the research tools as well as the questions raised in the previous chapter.

The following instructions were carefully regarded by the research members :

- As one of the aims of the research is "learning for mastering", so the question that is not attempted by pupils is not to be eliminated. Also, the question which is answered by all the pupils should not be taken as simple and uniscriminative. In all cases, the numerical data has to be given causal interpretation that may help in feeling the way to betterment.
- Bettering education is not reached by excluding the views of the minority however meagre, as such minority may be dominant in a certain governorate or limited local environment forming thus an absolute majority in such case, and hence, must have the requirements and needs answered. For this, even the least percentage has to be interpreted in depth similar to the highest percentage.

- The statistical treatment should not be exaggerated to the extent that it may hinder the decision-maker to reach the core of the research which is raising the potentiality of the one-classroom school. Any statistical treatment in this research must aim at the explanation and embodiment of a significant educational aim.

- Tests of the learning level of reading and writing, arithmetic and geometry had to be re-arranged after the end of marking and estimating the correct, wrong and unattempted answers in a way that starts with the questions that got the highest percentage of correct answers, then graded downwards until it ends with the questions with the least percentage of correct answers.

  As for "Science education" and "Social education", arrangement of the questions in three levels equivalent to the three cycles on the logic and assumption that there are some cultural aspects that have to be included in one cycle or the other in the light of the announced educational aims.

- To unify the analysis processes in tests of the learning level, the research board agreed to commit to the analysis of the numerical data for every test after classifying it into six tables showing:

(1) Results of the estimation of the test questions in the three cycles giving recognition of the wrong, the correct and the unattempted.

(2) Results of estimating the test items in the three cycles giving recognition of the correct, the wrong and the unattempted.

(3) Average percentage of the correct answers for the first cycle in each of the following cases :

   a) Educationally qualified teacher.
   b) Teacher with a non-educational certificate.
   c) Teacher who is unqualified and with no certificate.

(4) The same as above for the second cycle.
(5) The same as above for the third cycle.
(6) Average of the percentage of correct answers in the one-classroom schools and the formal mother-schools.

Such unification of the research course was not to impose limits on the thoughts of specialists, but each specialist was given the chance to add what he thought likely to affirm the nature of his subject matter, especially in the case of "Social education" that has got certain distinguishable characteristics.

On the basis of this method, and the aforementioned steps, it was possible to collect a lot of numerical and discriptive data as regards an evaluation of the present conditions of the one-classroom school and its teacher, as well as the learning level of its pupils comparing them with their peers in the formal mother-school.

Also, the attitudes of teachers, parents, local leaders and pupils towards this school were identified.

But what significance does the data obtained through the research tools have ?

To what extent can such significance be utilised for bettering education at the one-classroom school ?

The next chapter throws light on such questions.

# CHAPTER FOUR

## REALITIES OF MATERIAL AND HUMAN POTENTIALITIES OF THE ONE-CLASSROOM SCHOOL

- School premises
- School equipment
- Curricula
- Pupils' attendance and evaluation
- Evaluation system
- Administrative and financial organisation
- Teacher conditions and potentialities

# CHAPTER FOUR

## REALITIES OF MATERIAL AND HUMAN POTENTIALITIES OF THE ONE-CLASSROOM SCHOOL

As the material and human potentialities that are available for every educational institution is one of the important factors that affect its effectiveness in the realization of its aims, it is natural that we start this evaluative study by the identification of the realities of the human and material potentialities of the one-classroom school, and the extent to which these are appropriate, as well as the limits they put to the educational process.

To identify such realities, three cards have been applied :

(1) Card for the identification of the one-classroom school and which was answered by (28) of the education leaders (supervisors and department heads).

(2) Card for estimating the realities or actual conditions of the one-classroom school the data of which was obtained through field visits to the schools that were chosen as a sample of the research (40 schools).

(3) Card for the realities or actual conditions of the one-classroom school teacher, the data of which was obtained through field visits to the sample schools.

The following are the results of processing the data of these cards:

School premises

Only 7.8% of the education leaders of the one-classroom school believe that the premises are suitable as it is a primitive building that goes in line with the buildings of the village that the school serves. On the other hand, 82.5% of such leaders believe that it is not suitable for the following reasons :

- Absence of current water and water closets (84.2% of the respondents).
- Absence of school-yard- (78.9 % of the respondents).
- Narrowness of the building. (76.3% of the respondents).
- Inadequate illumination (63.1% of the respondents).

- Absence of a ceiling that protects the young pupils from the falling rain, or the sun-heat (42.1% of the respondents).

As for the evaluation made of the sample schools during the field visits, it could be classified in accordance with the data included in Table (4.1).

## Table (4.1)

Showing the condition of the premises of
the forty schools of the chosen sample

| Condition | % of the sample schools |
|---|---|
| A) As regards the place on which the school is established. | |
| - The one-classroom school occupied the building of a formal school after the end of the formal work times. | 37% |
| - A Mosque | 53% |
| - A hut or an unoccupied tract of land | 10% |
| B) As regards the location of the school | |
| - Outside inhabitant settlements | 20% |
| - Within population settlements | 80% |
| C) As regards the number of rooms | |
| - In one room | 92% |
| - In two rooms | 5% |
| D) As regards the services available at the school | |
| - Water is available | 22% |
| - Electric current is available | 25% |
| - Good ventilation | 82% |
| - Good illumination | 80% |

From the data of the above table, it is found that most school buildings of the sample schools are unsuitable for one or more of the following reasons:

- If the school is held in one of the places of worship, work in the school must cease at the time of worship apart from the belief on the part of some of the inhabitants that it is spritually unlawful to allow girls to enter the mosque. Such outlook is a narrow view at the genuine religious values. On the other hand, the mosque does not allow the hanging of educational aids or using the walls for the benefit of educational tasks.
- If the school is in a hired place or in a guest-hall (madiafa) the landlord may cause some troubles if the monthly rent is not paid in time, or if there is an occasion on which the guest hall has to be used for reception purposes as in occasion of death or marriage.
- If the school is in a hut, illumination and ventilation may not be sufficient which negatively affects the pupils' achievement.

- If the school is outside the residence area, some pupils are absent during weather changes for fear of illness.
- When the school has only got one room, it is difficult to keep the education aids or clean tools, if available.
- Absence of current water, water closets or urinals makes it difficult to get the pupils culturally acquainted with sound scientific principles.

Education leaders raised suggestions for raising the efficiency of the school premises, of which the following are some :

- Collecting donation from the inhabitants during the harvest time, and urging them to erect a suitable buidling with self-efforts.
- Using moving units, or improving the available buildings from the service allocations in the educational directorates.
- To levy some additional taxes on the co-operative societies for housing, and directing the money to be collected for the building of such schools.

- Allocating a certain budget for the letting of such schools.
- Building moving units for the service of bedouins and near-by estates.

One reason for supporting the moving educational units is the possibility of depending on them in a long-range programme for the universal educational service at remote areas in stages. They are to be moved from one place to another in accordance with the stage-requirements of the development plan.

## Equipment

The data of the Card for estimating the realities or present conditions of the one-classroom school have shown that the sample schools have the equipments as shown in Table (4.2).

Table (4.2)

Showing the equipments of the sample schools

| Statement | % of the schools |
|---|---|
| - School has seats | 15 % |
| - Pupils sit on straw mattress | 72 % |
| - Pupils sit on the ground | 12 % |
| - School has a blackboard | 100% |
| - School has chalk | 97.5% |
| - Notebooks and pencils (are brought by the pupils) | 100 % |
| - School books are available | 95 % |
| - School has library for pupils | 5 % |
| - School has a simple lab for science | 2.5% |
| - School has charts, graphs and maps | 12.5% |
| - School has models and the like | 5 % |

From Table (4.2) the following are shown :

- Pupils set on hips on ground or straw mattresses in 85% of the sample schools. This affects the good handwriting apart from its effect on the unsteadiness of their backbones. Besides, the uncomfortable sit lessens pupils' achivement.

- In all schools there are blackboards and chalk. Only in one school chalk was not available due to some emergency conditions related with means of communication.

- In all schools pupils buy the notebooks and pencils but the books are distributed free. In two schools, books had not arrived due to the slow routine and lack of attention of the headmaster of the mother school.

But as the promotion exam from one cycle to the next is held in February or May, an administrative difficulty does exist as regards the distribution of the suitable books on the promoted pupils from one cycle to the next.in February as it is only allowed to distribute the books of one cycle throughout the whole year at its beginning. Hence, promoted pupils from one cycle to the next have to borrow the books of the next cycle from their peers who dispense with them.

- In 38 out of the 40 sample schools there was no library: the school is held in a mosque, or a public place that cannot be closed. This requires that each school has to be provided with a cupboard with a lock for the books and educational aids, or simple lab to be kept as such tools have an important role to play in the educational processes.

Curricula

92% of the education leaders believe that the curricula of the one-classroom school represent a real problem for the following reasons :

- The courses are long compared to the study plan. It has to be taken into account that while a formal school plan has 28-32 periods weekly (according to the grade), it is only 16 periods weekly in the case of the one-classroom school distributed over five days as Friday and the market day are holidays. Hence, it is difficult that the course is tackled in a good way throughout the 16 weekly periods with 45 minutes duration each.
- The courses are higher than the pupils' standard as they are tough and dry, being confined to Arabic Arithmetic, geometry, science and social studies.

The plan does not include art education, music, physical training agricultural training or home-economics, which is a pupular subject to young pupils, apart from its significance to their educational formation.

Even science and social studies may not be taught in some schools due to the inefficiency of the teacher. In the sample schools it was found that (7) schools do not teach social studies at all and (2) schools do not teach science.

- As Egypt is on its way to universalize basic education that links education with work, theory with application within the framework of the requirements of the local environment, the curicula of the formal primary school which are applied as well in the one-classroom schools need be reconsidered and developed from this angle.
- The one-classroom school is characterized by more flexibility than the case is with the mother school in that the pupils and teacher find suitable time for work. Some such schools start at 9 o'clock, others 10 o'clock, a third category start at 12 o'clock at noon, a fourth at 2.30 p.m. Choice of the suitable time is likely to elevate school achievement.

Education leaders suggested the following as regards the curricula :

- Concentrating the study on the fundamentals in a way that fits with the reduced weekly school plan.
- Combining of the courses studied in each cycle in one book, as the school book used at the one-classroom school needs be modified in terms of form, content, printing, and drawing in order to suit the nature of work at the one-classroom school.
- Providing a detailed guide book for teacher to explain how he should teach to more than one educational level at a time and under the same roof.
- Introducing physical training, art and handicraft at such schools.
- Increasing the weekly period of the study plan whenever it is possible.

Attendance and Evaluation of Pupils

The one-classroom school is characterized by a high attendance rate among its pupils. In 92.5% of the sample schools, the percentage of attendance among the enrolled pubpils is over 75%. The low attendance rate in 7.5% of the sample schools is attributed to the following :

- Parents' need for children to help in the field, as well as mothers' need for daughters to help in looking after their young children.
- Cruelty of teacher.
- Changeability of weather especially when the majority of school are without ceiling.
- Children sickness.
- Teacher himself does not attend regularly at the fixed times.
- Inavailability of another dress for the pupil when his only one is washed or still wet.
- Not providing meals for children.

The education leaders see that the improvement of pupil attendence at the one-classroom school may be realized through the following measures:-

- Improving the school building and its equipment.
- Providing a meal for children.
- Providing free school dress.
- Allowing the pupil to participate in the fellow-up of the school.
- Getting the supervisor and headmaster or his vice to make a follow-up visit to the one-classroom school at least once a week.

- Giving due care to the record of attendance, and the follow-up of the absent children to find causes of their absence to help in the overcome of such causes.

Pupils' Evaluation System:

- As to the new-entrant, there is no objective method to get him join the cycle that suits his standard as the teacher asks him only a few questions in reading, writing and arithmetic, then records him in the educational cycle that he believes will fit with his standard.
- When a pupil is promoted from one cycle to the next, a written as well as oral exam, is held under the supervision of the headmaster of the mother school or his vice in February and May.
- It is possible that a pupil in one-classroom school is transferred to a certain grade at a formal school after his sucess at a written exam that fits with joining that grade.
- Systems of evaluation at the one-classroom school are characterized by being flexible and un-frightening to children. The teacher can simply transfer

a pupil from one educational cycle to the next, or to a lower one whereas in the formal school, promotion is made automatically in odd grades. and after success in a written exam in case of even grades.

- It is possible that a pupil at one-classroom school applies for the Primary certificate Exam which is unified at the level of the educational directorate , or the governorate after paying £E 2 as fees. The teachers of such schools suggest that the people are exempted from such fees due to their poverty on the one hand, and to encourage the pupils to apply for such examinations, on the other.

Besides, the education leaders suggested the necessity of applying the closed examination system at the one-classroom schools and give gruaduate children a terminal certificate, similar to that given to the graduates of illiteracy elimination classes. However, as will later be shown, the people strongly object such trend for the continuation of their children in education up in the ladder is one of their hopes being the only means for changing the social and economic status of the individual.

## The Administrative and Financial Organization

The following is some of the data about the financial and administrative aspects of the one-classroom school :

a) The one-classroom school teacher gets 20 piastres for every period he teaches provided that the total number of periods he teaches throughout the whole month does not exceed 70 periods. As such amount does not allow a decent life for the teacher, he is engaged in another work to increase his income as by reciting the Holy Koran on occasions, or renting a tract of land and cultivating it, or by working in commerce or any other job. Thus, his effort is exhausted and he is unable to better education adequately.

b) It is supposed that the headmaster of the mother-school, or his vice supervises the one-classroom school in terms of :

- Following-up the portions covered of the curricula.
- Orienting the teacher to more effective techniques of education.
- Providing the school with books, chalk and tools allowed: blackboard, attendance records, notebooks

of recording marks apart from the dispensed-with tools in his school such as old seats or teacher chairs.

- Providing meals for children in case the mother school is within the food system.

There are financial difficulties such as the following :

- Due to the school's location at a population settlement remote from public transport, and that slow transport only arrives through unlevelled roads, it has become difficult to follow up the attendance or work of the teacher, especially when it is recognized that the nearest school is 1-9 kilometres away from the one-classroom school and that the supervisor's office is (1-40 kilometres) away from the one-classroom school.

  Hence, rises the importance of delegating the follow-up process to the popular local authorities specially as some of the people are enthusiastic to have their children educated and are ready to watch the opening and closure of the school.

- Some teachers complain that their salaries are not paid regularly by the end of each month.

In many cases, the salaries of two or three months are accumulated due to the government routine. Such a difficulty has to be overcome by a firm administrative measure.

- Some schools complain that school books and chalk are delayed due to the uneven roads on the one hand, and for the routine measures on the other. Such difficulties may be overcome by good timing.
- No budget is allocated to the elevation of the material and human potentialities of the one-classroom school except for the item of teachers' salaries and teachers' training. However, even training has its expenses, and thus the teacher is not encouraged to join it. One training session at the capital of a governorate for a period of 1-7 days will require expenses for living, transport and other items that the one-classroom teacher cannot afford. It is thus clear that the one-classroom teacher training is important which requires that the supervisor should be given a limited number of schools that allow his visit to school at least twice every month. It is, not, at all, adequate that the school is visited twice a year and for one hour or so each time.

- Contact of the one-classroom school teacher with the mother-school is weak :
  - In five of the sample schools (12.5%) the teacher did not, at all, contact the mother school.
  - Twenty five teachers (71.4%) of the sample reported that they have benefited from such visits in terms of borrowing some educational aids or getting to know about good methods of teaching.
  - 10 teachers (28%) of the sample reported that their visit to the mother-school was related with settling some affairs related with their salaries, and that they have not at all benefited in matters of education or science.

From hence springs the need to make arrangements that the one-classroom teacher has to have periodic contact with his fellow colleagues during their work at the mother-school so that he may actually be trained. This may be possible during the market day during which the one-classroom school is closed while the mother formal school regularly works.

- Some administrative authorities do not co-operate with the one-classroom teacher. In 15 schools of the sample (37%) the education directorate did not respond to the teacher's request to furnish the school with some furniture.

## Teacher conditions and potentialities

The results of the card of teacher condition and which was applied to the forty sample schools give numerical data that is relevant to the following aspects:

- Teachers' qualification and training.
- Economic and social conditions of teachers.
- Teachers' estimations of the potentialities and position of their schools.

The following is the detailed discussion of these aspects :

### (1) Discriminating data :

Such data includes the age-groups of teachers, experience years, social status, sex, and residence as is shown in Table No. (4.3).

### Table No.(4.3)

### Showing the discriminating data of forty teachers in the sample schools

| Statement | | No. | Percentage |
|---|---|---|---|
| Age-groups: | 20 - 29 years | 12 | 30% |
| | 30 - 49 years | 10 | 25% |
| | 50 - years | 18 | 45% |
| Years of experience at the school | | | |
| New entrants working for 1st year | | 15 | 37.5% |
| Old-hands with more than one year at the school | | 25 | 62.5% |
| Sex and social status | | | |
| Males | | 36 | 90 % |
| Females | | 4 | 10 % |
| Married | | 28 | 70 % |
| Unmarried | | 12 | 30 % |
| Place of residence | | | |
| In the same village | | 30 | 75 % |
| In another village | | 10 | 25 % |

The data obtained from the results of Table 4.3 shows the following :

The majority of the age-group 20-29 years (30%) of the sample are waiting for employment in other jobs. Hence, we should not expect that most of them have an aptitude to master their work.

Besides, the majority of the age-group (30 years and over) are of the officials or those who wish to increase their income by working at the one-classroom school some of whom try to master their work so that their salary may continue. The original job of some of them affects their efficiency in teaching.

As for the majority of the age-group (50 years and over) they are of the old men of religion who recite the Holy Koran and who are inclined to teach their pupils to learn the Koran by heart and do not, on the whole, master the scientific or social studies.

B) As regards the years of experience at the school

37.5% of the teachers of the sample work at the one-classroom school starting from this year, while 62.5% are of the old-hands who acquired field experience in work at the one-classroom school.

This point, together with the previous one, indicate the need for the diversification of the training programme to answer the requirements of each teacher. This is acertained by the diversity in the status of teacher as to sex and social condition.

### C) As regards the place of residence

75% of the sample live in the same village in which the one-classroom school is situated which urges them to give the best they can for reasons such as the relationship or neighbourhood with the pupils. They cannot bear the effort of daily travel. As for the strangers who represent (25%) of the sample, they are mostly exhausted by the troubles of transport and most of them work automatically at the one-classroom school having no relationship that links them with the pupils' families.

### (2) Qualification and training of teachers

The Table No. (4.4) shows the qualification of the teacher of the sample and the extent to which they have participated in special training programmes for teaching in the one-classroom school.

Table 4.4 Showing the qualifications and training of the teachers of the sample

| Statement | No. | Percentage |
|---|---|---|
| Qualifications | | |
| Without any qualification | 8 | 20% |
| Hold school certificate | 23 | 57.5% |
| Educationally qualified | 9 | 22.5% |
| Training | | |
| Attended training programmes | 26 | 65% |
| Has not attended any training programmes | 14 | 35% |

From the data of the table No. (4.4) it is shown that :

All teachers of the sample are unqualified for working at the one-classroom school because even the educationally qualified are originally trained to teach at the formal six-grade schools. Besides, only 65% of the teachers of the sample have attened special training programmes for teaching more than one educational level under the same roof and at the same time.

This shows the extent to which the qualification of teachers especially for these schools is needed. This may be through special sections in Teacher Training Schools, together with allowing more training programmes for the teachers already at work, provided this will not be during their teaching time. It so happened that most of the teachers of the sample who attended training programmes in one town far from the villages showed great resentment as such training will cost them a lot. Besides, they reported that training is confined to some lectures and a few non-specialized general discussions.

## (3) Economic and social conditions of teachers

All teachers of the sample have another job at times other than the teaching times at the one-classroom school, Such work occupies 40 hours and more weekly for 37.5% of the sample, and occupies less than 40 hours weekly for 62.5% of the sample.

This shows that the one-classroom teacher is not whole-time devoted for his job as his salary does not exceed - as already mentioned, 20 piasters per period with a maximum of 70 periods a month, which does not allow, decent standard of living. It is certain that this non-devotion to work at the one-classroom school makes the outcome low and necessitates work to find some means to elevate the efforts wether through material and other incentives.

It is observed that some teachers of the sample have refused to join the training programmes. Those who acually joined such programmes resented that the programmes were held in towns far from their original and subsidiary work which affects their income.

## Teachers' estimates of the potentialities and conditions of the schools in which they work

Table No. 4.5 shows the teachers' estimates as to the time of study, the duration of the school day, the building and equipment of the school and the extent of the peoples support atd the mother-school to their own one-classroom school.

Table No.(4.5) Showing the estimates of the one-classroom teachers to the potentialities and conditions of their schools.

| Statement | No. | Percentage |
|---|---|---|
| Believe that school times are suitable | 33 | 82.5% |
| Believe that the duration of school day is suitable. | 25 | 65.5% |
| Believe that the school building is suitable. | 14 | 35.0% |
| Believe that the present curricula are suitable. | 31 | 77.5% |
| Believe that the school furniture is suitable. | 5 | 12.5% |
| Believe that the present books are suitable | 28 | 70.0% |
| Believe that having more than one cycle is suitable. | 30 | 75.0% |
| Believe that the people's support is adequate | 26 | 65.0% |
| Believe that the support of the mother-school is adequate. | 19 | 47.5% |

From the data of the Table 4.5 it is shown that:

- 82.5% of the individuals of the sample see that the school times are suitable as they accord with the time of other jobs that they practise. However, the number of teachers who believe that the school times are not suitable means the need to allow the chance for teacher to change the times of school to suit them and hence ensure their regular attendance.

- 62.5% of the sample believe that the duration of the school day is suitable as it allows a chance to undertake another work as well. 38.5% of the sample believe that that the school day is short and unsuitable for satisfying the requirements of the curriculum. Such variation in opinion calls for an investigation on how the chance is to be allowed for the teacher to be wholly devoted to work at his school and the change of school books in the light of courses that serve the conditions of the school. 22.5% of the individuals of the sample believe that the present courses are unsuitable, and 30% of the individuals of the sample believe that the school books are unsuitable. 25% of the individuals of the sample believe that having more than one cycle in the same room is unsuitable as 28 books are to be used :

6 for Arabic, 6 for Arithmetic and geometry, 6 for science and hygiene, 6 for religious education and 4 for social studies.

- 35% of the individuals of the sample believe that the school building is suitable and 12.5% believe that the furniture is suitable as it accords with the poor environment that the school serves. However, the opposers of such view look forward to have the same standards of the formal school.

- 65% of the individuals of the sample believe that the people support the school. The evidence for this is that 30 schools of the sample (75%) are not hired but established by self-efforts as a mosque and school, and provided with straw mattresses from their own money. However, the opposers to this view believe that the support must extend to cover the expenses of building an independent room for the one-classroom school so that it may extend its activities that are restricted by the holy view that the mosque has.

- 47.5% of the sample are satisfied with the support given by the formal mother school to them. It is certain that such support should extend to teacher training and providing him with teaching aids as well as providing the one-classroom school with equipment and provide its pupils with meals if possible.

### (5) Evaluating the teacher's position in the class

The teachers of the one-classroom school undertook the explanation of some lessons before the research team during their field visit. They also showed them their registers. From this item in the evaluating card, it was possible to get the data included in the Table No. 4.6.

Table No.4.6: Showing the researchers' evaluation of the teachers' position inside the sample schools.

| Statement | No. | Percentage |
|---|---|---|
| Teaching Method | | |
| - Teachers engage all pupils whatever their cycle is | 32 | 80.0% |
| - Teachers engage pupils from varied cycles in one task. | 30 | 75.0% |
| - Teachers attend to some pupils leaving others engaged in another task. | 9 | 22.5% |
| - Teachers get the help of some pupils | 17 | 42.5% |
| - Teachers whose work is dominated by rote learning. | 21 | 52.5% |
| - Teachers benefit by the environmental potentialities. | 17 | 42.5% |
| - Teachers attend to written works of pupils. | 10 | 35.0% |
| - Teachers give more than is formally suggested to help the under-achievers | 16 | 40.0% |
| - Teachers cover what is included in the school book. | 35 | 87.5% |
| - Teachers unable to cover what is included in the school book. | 9 | 22.5% |

Table No. 4.6 (Cont.)

| Statement | No. | Percentage |
|---|---|---|
| - Teachers use teacher's guidebook | 10 | 25.0% |
| - Teachers use teaching aids | 5 | 12.5% |
| - Teachers read books and references | 6 | 15.0% |
| - Teachers discuss with pupils results of examinations. | 19 | 47.5% |
| - Teachers attend to health aspects of their pupils | 23 | 57.5% |
| - Teachers attend to the social aspects of their pupils | 27 | 67.5% |
| Registers | | |
| - Teachers keep pupil attendence registers | 37 | 92.5% |
| - Teachers keep registers for marks given to their pupils | 17 | 42.5% |
| - Teachers keep lesson notebooks | 32 | 80.0% |

From the data of Table No. 4.6, it is shown that :

## As to the method of teaching

Despite the rise in the percentages of estimation given to the positive aspects of the teacher's position at teaching, such percentages have still to be risen to the utmost possible rate in accordance with objective criteria by urging the teacher to innovate new styles for bettering his position in the class, and accordingly elevate the educational effectiveness of pupils. This may be attained through :

- Getting the help of some monitors to attend some of the under-achivers or better the education of pupils in one of the cycles as 42.5% of the sample actually did.
- Benefiting from the potentialities of the local environment so that the pupils of one cycle are sent, for example to collect data from the environment, while the pupils of the other cycle or two cycles are kept in class; an actionthat lessens the burden of work distribution thrown on the teacher as (42.5%) of the individuals of the sample actually did.
- Supporting the discussion and activity method so as to outweigh the dominant rote-teaching that is prevalent among (52.5%) of the sample of teachers.

- Preparing a simple guide for the teacher that helps him in his daily performance. Thus, the number of those who benefit from it rises to more than 25% of the sample.

- Arranging study workshops in which the teachers of the one classroom school are encouraged on dialogue, exchange of views and experience on means and methods of overcoming the obstacles that they encounter such as the use of low-cost teaching aids that basically depend on the raw materials from the local environment.

- Urging the teachers to discuss, with their pupils, the results of examinations as a new style for bettering their standard through getting them to know their points of strength and weakness in their answers. In this way, the percentage of those following such style will exceed the 47.5% of the sample.

- Teacher's attention directed to the health and social aspects of the pupil is likely to urge the pupil and his family appreciate the teacher's work, on the one hand, and make the pupils feel that special attention is directed to them driving them forward to improve, on the other. Such attention has to be raised so the percentage will rise between (57.5 - 67.5%).

- The rate of teachers who consult books and references must be raised to exceed the 15% of the sample. This may be attained through providing some educational and cultural books to them as a loan or as a gift.

- Inability of 22.5% of the sample to cover what the school book includes shows the need to lessen the number of the books used and reconsider its material to be easily tackled.

As to the teacher's registers

It is important that all teachers of the one-classroom school keep registers for the attendence of pupils, and their marks in the examinations together with the notes of lessons. Having less than 100% in such aspects indicates lack of seriousness on the part of the teacher. Hence, teachers should be trained on the classification and simplification of registers to make them functionally effective every school day.

# CHAPTER FIVE

# LEARNING LEVEL OF SCHOOL SUBJECTS

Firstly: Learning level of religious education

Secondly: Learning level of Arabic language

Thirdly: Learning level of arithmetic and geometry

Fourthly: Learning level of science education

Fifthly: Learning level of social education

## Chapter Five

## Learning Level of School Subjects for the One-classroom School Pupils

* * * *

### Firstly: Learning Level of Religious Education

### Objectives of Learning Religious Education

The religious aspect is one of the major aspects in the formation of the Egyptian character. It is even one of the two bases in the slogan of 'Science and Faith' that Egypt raises at the present time. Hence, it is natural that education in various stages attends to the development of religious education in a way that accords with the modern view of what the heavenly religions conceive as directions of behaviour.

Religious education does not mean the confinement to worship, or beliefs that are absorbed by the Egyptian citizen since his very early infancy through the family and places of worship. It extends to belief in the drives of behaviour such as honesty, unselfishness, seriousness, co-operation, sincerity to work, dependence on God as different from fatefulness, giving and taking without cheat, chastity, tolerance, fairness .... etc.

## Method of measuring the level of religious education

In an attempt to identify the level of the pupils of the one-classroom school in the religious aspects, the research team was inclined not to put an independent test for the measurement of such aspect on the same line adopted in Arabic language tests, arithmetic and geometry, science education or social education, as this test may give numerical results that are not expressive of the actual role of the one-classroom school for two reasons:

I- The religious behaviour of the youngsters in Egypt is influenced by the depth of the religious attitudes of their families.
2- The religious behaviour of the youngsters in Egypt is influenced by the overall cultural role that is undertaken by the places of worship.

It was thus believed that in the identification of the learning level of religious education to take into account the ideal and moral concepts that are derived from holy books, and which are included within the school subject tests themselves, together with the observations made during the field visits when these tests were applied.

When the tests(I) in this research are reviewed, we find that:

(I) In the measurement of the learning level of reading we notice that:

a. Concept of unselfishness is included in the ninth question.

b. Concept of honesty is included in the tenth question.

c. Concept of kind treatment is included in the eleventh question.

d. Concept of co-operation and seriousness is included in the twelfth question.

(2) In the learning level test of writing we notice the following:

a. Concept of sincerity is included in the question no. 26.

b. Concept of dependence on God as against fatefulness is included in question no. 27.

(3) In the learning level of arithmetic we find that the problems are related with daily life problems which rely on honest precision in buying and selling.

(4) In the learning level test of science education we find that:

---

(I) See appendixes no. 4,5,6,7 and 8.

a. Concept of health and chastity is included in the first question.

b. Concept of open-mindedness and tolerance is included in the sixth question.

(5) In the learning level test of social education it is found that:

a. Concept of unselfishness is included in the tenth question.

b. Concept of fairness is included in the question no. 39.

c. Some religious facts are included in five questions from no. 45 to 49.

All these concepts are realities which are preached by heavenly religions and are as well intended by the religious education subject in Egypt for the sake of an enlightened religious culture.

Results and interpretation of the study

The following chapters show the results of the answers to the referred to questions and which are related with religious education each in its original place of the learning level test of Arabic, arithmetic & geometry, science education, and social education.

In addition to the fragmental results throughout the school subjects, direct observation of the researchers to the one-classroom pupils during their answer to questions, and during their discussions in the question-naire of attitudes towards their school, and during the intervals and while eating biscuits and chocolate at the end of each test, were of value in the identification of the extent to which they have absorbed the religious culture and adopted the religious principles and concepts in their actual behaviour.

The following is a review of the results of the general observations:

- The absorption of pupils of the religious concepts steadily increases from the first cycle to the third. This is clear as regards the concepts of unselfishness and honesty, co-operation, give and take without cheat. It is less clear in the concepts of kind treatment, seriousness, sincerity in work, chastity, tolerance and fairness. It shows itself in a still weaker form in the concept of dependence on God. This may be interpreted by the natural growth of the socially normal child which makes him shift from clear egotism to 'others', or from vagueness of the confines of honesty, and the inability to discriminate between one's own possessions and what belongs to others, to a more accurate limits of the possession of each .... etc. Variation in the absorption of different concepts may be attributed to the cognitive growth level.

- Results of the one-classroom pupils in religious education are higher than the results of the pupils of the mother-school, if the direct observations are added to the quantitative data of the tests.

This may be interpreted by the close family relationships between the majority of the one-classroom pupils and their constant face to face contact with a small population settlement make them absorb the implications of unselfishness, kind treatment, fairness and tolerance.. etc. which are not allowed in the case of the formal mother-school with great number of pupils and where some relations are dissevered.

- The marks on the 'religious facts' are higher in the case of the one-classroom pupils in case the teacher is a man of religion. This is interpreted by his inclination to make his pupils memorize what he himself masters.

- The marks of pupils in religious education are associated with the quality of the teacher; they are higher when the teacher is educationally qualified than the case is with the teacher who does not hold any certificate. This may be interpreted by the educationally qualified teacher being more aware of the importance that religious concepts and culture pervade every minute and every school subject.

- No difference is found between the results of pupils learning at one-classroom school in a mosque and in other places. This is interpreted by the fact that the teacher regards the place of learning merely as a shelter for pupils during the learning process regardless of the function of the place being originally a place of worship or other.

These results show the extent to which there is need for:

1. Elevating the standard of teachers.
2. Extending the religious culture to all school subjects.

In the last chapter, we shall review ways of realising this through teacher preparation and training processes, through the recommendation to prepare the school books that deal with religious education, Arabic language, arithmetic and geometry, science and social education, in an integrated form for the first two cycles.

## Secondly: Learning Level of Arabic Language

### Linguistic objectives

The one-classroom school aims at arranging the pupil's language, and elevating its level so that he may have the abilityof functional expression of life positions in writing, speach and absorption of what is read or heard. All this has to be reached in easy style, sound dictation and good readable handwriting.

The basic skills intended by the pupil's learning of Arabic through the three cycles at the school, and which cover the six grades of the formal primary school are:

- Identification of the letter and writing it.
- Identification of the word and writing it with the help of a picture.
- Identification of abstract word and writing it.
- Identification of the sentence and writing it.
- Understanding the drawn statement and writing it.
- Understanding abstract statement.
- Reading the statement and writing it, arranging its words, and filling in with the missing words.
- Editing the letters that the pupil requires for correspondence.
- Editing the required requests for the Service bodies.
- Understanding what he hears or reads through the information and culture media.
- Understanding the statement and writing it through audition.

**Tests**:

Tests were put to measure the pupils' level of linguistic learning in the light of the previously stated objectives and skills, through the curriculum put for the school and the assigned school books. Thus, a test for reading, another for writing, and a third one for dictation were combined in one graded test through which to measure the pupils' abilities in the three cycles starting from grade one and ending with grade six. As has already been mentioned, the first cycle includes grades one and two, the second cycle includes grades three and four, and the third cycle includes grades five and six.

The test was three times applied in schools representing various environments, and on a sample of thirty (30) pupils each time. In the light of these experiments, many orientations and changes were made to the test items, until the test was put in its final form. This was reached on the basis that the ultimate goal is that the pupils of the first and second cycles reach solution, from the beginning of the test, equivalent to what is shown by the percentages of the following table. As for the third cycle, all the test to be attempted by its pupils.

Table 5.I

Showing the percentage of the test questions intended for each cycle

| Cycle | Reading | Writing | Dictation |
|---|---|---|---|
| First Cycle | 51.7% | 28.5% | -- |
| Second Cycle | 75.8% | 57.6% | 70% |
| Third Cycle | 100% | 100% | 100% |

Application of the test

The test was applied on a sample of pupils of the one-classroom school (1008 pupils), in addition to another sample from the formal school pupils (150 pupils). The formal school sample is taken as a measure on which the one-classroom sample is to be evaluated.

General results of the test (General standard)

In the light of what is intended in each cycle, and the comparison of the one-classroom school, table 5.2 is made.

## Table No. (5.2)

Showing what is intended in each cycle and comparison of the one-classroom school with formal school

| Cycle | Results of the test for each cycle | | | | | | Standard aimed at in each cycle | | |
|---|---|---|---|---|---|---|---|---|---|
| | One-classroom school | | | Formal school | | | | | |
| | Reading | Writing | Dictation | Reading | Writing | Dictation | Reading | Writing | Dictation |
| First | 25% | 14% | 10% | 41% | 23% | 17.5% | 51.7% | 28.5% | - |
| Second | 38% | 16% | 26% | 58% | 42% | 34% | 75.8% | 57.6% | 70 % |
| Third | 26% | 24% | 49% | 51% | 65% | 80% | 100 % | 100 % | 100 % |

## Comment on the general standard of the test

- It is noticed that the success rate in reading is higher than in writing in all cycles. This is natural as the absorption of writing skills is not reached until the reading skills are mastered.

- Dictation is not aimed at in the first cycle. Still, its success rate reached 10% in the one-classroom school, and 17.5% in the formal school. This is an evidence of a praiseworthy effort especially as regards the one-classroom school where there is no incentive for the teacher except his loyalty to his environment.

- The result of the third cycle came out even lower than the result of the second cycle some times in reading and writing. This is interpreted by the following:

- Pupils of the third cycle reach the age of employment and are absorbed by the labour market, and are thus , engaged in matters far from study. The backwardness of their environment -socially, economically and culturally- allows a chance for drop-out from school especially when we take into consideration that the present theoretical education, to the parents' way of thinking, has no clear avail as it is not related with the activities of the society, and consequently, they do not feel that -through such education- their children are oriented for the life of work. Besides, the ambition of the majority of parents and children to continue education at higher educational stages is impeded by various conditions which are unfavourable for educational continuation.

- If the result of the one-classroom school is lower than what is aspired in all cycles, the difference between such a school and the formal school is not great, a matter which makes it not far from the objectives for its establishment. One point must be borne in mind in favour of the one-classroom school, that it undertakes its mission with limited potentialities and under unfavourable conditions, and are located in areas that can hardly be reached. This isolation weakens and lessens its contact with the formal school.

All these necessitate the continuation of the one-classroom school and its support to be able to undertake its mission in a better way.

## As regards the pupils' absorption of the skills of reading, writing and dictation:

### I- Reading

Table no.5.3 shows the aimed at standards for the pupils' absorption of the reading skills in the three cycles, and the standard the pupils have actually reached compared to what their peers in the formal school have reached:

| | 1st Cycle | | 2nd Cycle | | 3rd Cycle | |
|---|---|---|---|---|---|---|
| | Aimed at through the test 51.7% | | Aimed at through the test 75.8% | | Aimed at through the test 100% | |
| | One-cl. School | Formal School | One-cl. School | Formal School | One-cl. School | Formal School |
| Identify the letter | 42% | 66.6% | 75% | 82% | 83% | 84.5% |
| Identify word in picture | 42% | 61% | 71% | 91% | 84% | 90% |
| Identify abstract word | 28% | 46.5% | 50% | 66% | 76% | 69% |
| Identify sentence & understand it | 20% | 38% | 44% | 48.5% | 67.5% | 61.5% |
| Understand paragraph | 5% | 6% | 22% | 20.5% | 30% | 60% |

From the above table we notice that:

- The results of the first cycle of the one-classroom school are very much lagging behind the equivalent at the formal school while the gap is narrower in the other cycles.

The reson for this may be that the teacher in the one-classroom school is -in most cases- not educationally qualified, which means that he does not master the teaching method of spelling at the beginning of the educational process. In most cases , such teacher starts the teaching of spelling by following the partial traditional method which is in contradiction with the method on which the school book was designed. This obstructs the absorption of the required skills at the start of the educational process.

- Except for the above part, it is noticed that the results are high and -in many cases- exceed what is aspired for. This asserts that the pupils have acquired skills without obstruction.
- The understanding of the paragrapth is not aimed at in so far as the first cycle is concerned. Still, its results have reached 5% in case of the one-classroom school, 6% in case of the formal school. This may give an evidence for a praiseworthy effort.

2- Writing

The following table (no. 5.4) shows what the one-classroom pupils have achieved as regards the writing skills compared to the formal school pupils concerning what is aimed at in each test.

Table No 5.4

| Skill | Ist Cycle<br>Aimed at<br>28.5% | | 2nd Cycle<br>Aimed at<br>57.6% | | 3rd Cycle<br>Aimed at<br>IOO% | |
|---|---|---|---|---|---|---|
| | One-cl School | Formal School | One-cl. School | Formal School | One-cl. School | Formal School |
| I. Idemtify the letter | 22% | 55% | 5I.5% | 68% | 72% | 69% |
| 2. Expression confined to a picture | 2I.5% | 54% | 43% | 65% | 68% | 63% |
| 3. Expression confined to story in pictures | I7.5% | 50% | 40% | 69% | 65% | 62% |
| 4. Expression confined to pictured situations | I4.5% | I2% | 22% | 49% | 53% | 70% |
| 5. Occupy leisure time | 7% | 4% | I4% | 32% | 44% | 49% |
| 6. Sentence arrangement | 5.5% | 3% | I4% | 30% | 38.5% | 49% |
| 7. Free expression (discussion) | 8% | 3% | I6% | 26% | 50% | 59% |
| 8. Free expression (writing a request) | 9.5% | 0 | 5% | 9% | I9% | I6% |
| 9. Free expression understand an issue and discuss it | II% | 9% | 5% | 9% | 26% | 2I% |

From the above table we notice that:

- The items, starting from no. 4 (expression confined to pictured situations) are not aimed at in the first cycle, also no. 7 (free expression - discussion) is not aimed at in the second cycle. Still, the result was not zero in the skills that are not aimed at as is clear from the figures of the table. This is a praiseworthy phenomenon.

- The teaching results of the first cycle in the one-classroom school are low, and this affirms the importance of havingeducationally qualified teacher at the beginning of the educational process.
- In the other cycles, the results of the one-classroom school are similar to the results of the formal school, and this indicates that most of the writing skills are absorbed. If there are some problems, they are 'dictation' problems which will be elaborated when dealing with the dictation analysis.
- The equivalence that is observed between the two schools as regards the third cycle may be explained by the transference of some of the formal school pupils in the fifth and sixth grades to the one-classroom school on its opening. This was either because of the nearness of the school to these pupils' homes especially in the light of their low ambitions to continue their education due to the isolation from schools of higher educational stages as well as because of the low social and economic standard of the environment.
- A glance at the above table shows that the result is acceptable in the light of the conditions under which the

one-classroom works. The difference between the results of the school and those of the formal school, which are not striking, call for an appreciation of ot its role and the support of the efforts exerted.

### 3- Dictation

Table No. 5.5 shows the extent of the one-classroom pupils' achievement compared to that of the formal school in accordance with what is aimed at in all three cycles.

Table No. 5.5

| Dictation difficulties and the extent to which they were overcome | Ist Cycle | | 2nd Cycle | | 3rd Cycle | |
|---|---|---|---|---|---|---|
| | Dictation is not aimed at | | Achievement aimed at | | Achievement aimed at | |
| | One.cl School | Formal School | One-cl. School | Formal School | One-cl. School | Formal School |
| (Hamza) at the middle of the word | 7% | 9% | 23% | 30% | 47.5% | 75% |
| (Hamza) at the end of the word | 6% | 20% | I9% | 32% | 38% | 78% |
| Taa el-marbouta | I9% | I3% | 23% | 3I% | 45% | 82.5% |
| Taa el-maftouha | 7% | 9% | 24% | 23.5% | 43% | 72.5% |
| Alef el-layena | 9% | 38% | 34.5% | 49% | 56% | 88% |
| Letter Alef (the a) | 9% | I4% | 26% | 35% | 46% | 80% |
| Letter Waw | I0% | 22% | 32% | 44% | 63% | 85% |
| Letter Yaa | I2.5 | I3% | 26% | 3I% | 5I% | 79% |
| Average | I0% | I7.5% | 26% | 34% | 49% | 80% |

**Notes**

- Dictation is part of the writing, the function of which is to identify the difficulties with the aim of facilitating them.

- Dictation is not aimed at in the first cycle. Still, I0% of the one-classroom pupils and I7.5% of the formal school pupils has some success in it.
- However, the result in the second cycle is, on the whole, a low one in the one-classroom school, and to some extent in the formal school. This necessitates that measures should be taken to facilitate the dictation difficulties.

Suggestions

- It is clear from the result of the research that the one-classroom school has achieved satisfactory results (in the Arabic language), which were in some cases equivalent to the formal school, and in other cases the standard was in way less than 70% of the standard of the formal school despite the educational conditions under which the one-classroom school works. This calls for some aid to be directed to the one-classroom school as well as the rationalization of the educational process in it and linking its curricula with the environment: conditions and activities.
- It may be better if all school subjects in the first cycle are taught through one school book to be written by a group of specialists in various subjects in a way

that lays stress on reading and writing: the main goal of the educational process in the early years.

- As for the second and third cycles, it is recommended that all branches of the Arabic language are taught through one school-book. Thus, the branches of the one school subject are linked together, the knowledge provided is relevant when linked with the activities of the society.

- In all school books of the primary stage there is gradation in language in accordance with the results of the psychological and sociological studies. An attempt is made to bridge the gap between home and school so that the pupil moves from what is 'familiar' to what is 'unfamiliar', from what is 'known' to what is 'unknown! making as much benefit as possible of the colloquial and classical language. An attempt is also made to promote the colloquial into classical within the limits of the child's dictionary and in the light of the psychological studies.

- The aimed at language in teaching, learning, and writing is the Arabic language that is easy in structure, grammar and letter drawing, and which is suitable for the life requirements in the pupils's environment without harm to its genuine origin in patterns of structure, derivatives and pronunciation.

- Books of the first cycle are written after the easy alphabeticization of the Arab League Educational, Scientific and Cultural Organization, and according to which a letter is used nearly in one form at the beginning, the middle and the end of the word (30 forms of alphabetics).

- Books of the second cycle are written after the easy alphabeticization of the Arabic language Congress, according to which the one letter has many forms (64 alphabetics).

- Books of the third cycle are written after the current alphabet.

- Words in all books of the three cycles are provided with Arabic phonetic symbols.

- With each book, the authors provide a 'Teacher's Guide' including language glossary so that the teacher may be aware of the language gradation throughout the three cycles.

As regards the methods of teaching

The Committee for the Facilitation of Reading and Writing (1979) has chosen the dual method or the 'Structural' one and recommended that it should be followed in the primary stage.

The most important elements of dualism in this method are the following:

- It provides complete meaning units for children and these are words with meaning, and hence the pupils may benefit by the merits of the words method.

- It provides them with easy sentences in which some words are repeated, and hence they can benefit by the merits of the sentence method.

- The method gives attention at the proper time to the phonetic analysis of words, and the linkage of sounds with their symbols so as to reach the complete cognition of the total meaning, and hence, to reach the meaning value of the letter. This is implicit realization of the phonetic method.
- In one of its later stages, there is onetrend that aims at the identification of name and drawing of alphabetics, and hence, the merits of the alphabetical method are attained.

What accounts for the success of such method is its start with short words and current styles in the child's life with illustration through coloured pictures and giving special show of the intended words especially in grade one.
In line with this method, teaching is implemented and books are written.

## Thirdly: Learning Level of Arithmetic and Geometry

=================

One of the aims of the one-classroom school is to debelop the pupils' ability to perform the arithmetic processes that are related with daily life situations. Hence, the evaluation of the effectiveness of the school in the realization of such aim is related with the pupils' learning ability. Through detecting the positive and negative factors influencing the pupils' level, it is possible to feel the way to betterment. In this part of the chapter we deal with the method used for the detection of the learning level of arithmetic and geometry as well as the results of the tests and their interpretation.

### Aims of teaching Arithmetic in the one-classroom school

The one-classroom school pupils study 'Arithmetic' as a basic school subject side by side with Arabic language. One hour is devoted every day for the study of arithmetic same as the study of Arabic language. No pupil is enrolled as successful unless he has succeeded in arithmetic.

The course of arithmetic is divided into three cycles in line with the division of the school into three cycles. Such course was designed in 1974 as a quick action taken at the beginning of the establishment of these schools. It is still under use as a temporary course. The following points have been taken into account in this course:

I. Study of the basic arithmetic concepts; addition, subtraction, multiplication and division of integers and fractions.

2. Study of the basic processes of common and decimal fractions.

3. Application of what has been studied derived from social life such as taxes, scale drawing, division, proportion, proportionate division, saving, profit and loss, areas, volumes, percentage and simple interest.

4. Some preliminary foundations of geometry:

The main trend in putting the course was the simplification of the course that is studied at the primary stage from grade one to grade six with the following points taken into account:

a) So that the one-classroom pupil may be able to join the formal school in case of reaching an appropriate level, and joins the grade that fits his standard.

b) So that some pupils may apply for the exam which is held by the end of the sixth grade of the formal school.

c) So that the one-classroom pupil deals with arithmetic in a sound way whether in purchase, taxes, ... etc, as well as all that he needs in his environment.

## Aims of the test

The arithmetic and geometry test for the one-classroom school aims at the following:

1- Measurement of the pupils' understanding of arithmetic processes on integers and fractions.

2- Measurement of the pupils' skill in performing the basic processes on integers and fractions.

3- Diagnosis of the points of weakness and strength in arithmetic for the pupils of each of the three cycles.

4- Identification of the relationship between the existence of one, two or three cycles in one classroom and the achievement level of the pupils in arithmetic.

5- Specification of the appropriate skills and knowledge for each level in the three cycles.

## Building-up the arithmetic test

Arithmetic is one of the subjects that are arranged on logical and psychological foundations. In the study of arithmetic , we start with simple concepts such as the recognition of figures , formation of figures, then - in graded steps- the basic processes: addition and subtraction then multiplication and division. In all cases, gradation in the level of each process from the easy to the difficult was ensured so that the test was built up on sound basis. A pupil cannot add big numbers (composed of three or four) unless he has got knowledge of the addition of a number which is composed of one figure, but cannot use the idea of carrying in addition or borrowing in subtraction without knowledge of the tens, etc... So, in building-up the arithmetic test, we started by the analysis of arithmatical and fundamental processes into various graded levels:

(I) Addition of integers at various levels, and it is composed of:

a) Addition of a number which is formed of one figure under 9.

b) Addition of a number which is formed of two figures with another of two figures without carrying.

c) Addition of a number which is formed of two figures with another of two figures with carrying.

d) Addition of a number which is formed of two figures or more with another which is formed of two figures or more.

e) Addition of numbers of which some figures are zeroes.

f. Problems on addition processes in various forms.

## 2. Subtraction Processes:

The basic concepts of the subtraction process are defined as follows:

a) Subtraction of a number composed of one figure from another composed as well of one figure.

b) Subtraction by borrowing, of a number composed of one figure from another composed of two figures.

c) Subtraction of a number composed of two figures with borrowing.

d) Subtraction of a number composed of two figures without borrowing.

e) Subtraction of numbers composed of three or more figures from numbers composed of three or more figures.

f) Subtraction of numbers with zeroes.

## 3. Multiplication Processes:

The multiplication processes include the following standards:

a- Facts of the multiplication table.

b- Multiplication of a number composed of one figure by another composed of two figures.

c- Multiplication of a number composed of one figure by another which is composed of many figures.

d- Multiplication of a number composed of one figure by another which is composed of four figures.

e- Multiplication of a number composed of two or more figures by another which is composed of two or more figures.

f- Multiplication of numbers including zero.

g. Sums on various levels of multiplication.

## 4. Division Processes

Division processes include the following levels:

a- Division from the multiplication table.

b- Division of a number composed of two or more figures by another composed of one figure without remainder.

c- Division of a number composed of three figures by another composed of two figures without remainder.

e- Division of numbers including zero by another composed of one figure, or by another composed of two figures.

f- Division by a number composed of three figures without remainder (long division).

## 5. Fraction Processes:

The topic of fractions includes the study of fractions that are used in social life, i.e. ordinary (normal) fractions, and decimal fractions.

Ordinary Fractions:

a- Addition of a fraction to another so that the denomenators are identical.

b- Subtraction of one fraction from another so that the denomenators are identical.

c- Multiplication of an integer by a fraction.

d- Multiplication of a fraction by a fraction.

e-- Multiplication of a fractional number by another fractional number.

f- Division of a fraction by an integer.

g- Division of a fraction by another fraction.

h- Division of a fractional number by a fraction.

i- Division of a fractional number by a fractional number.

Decimal Fractions:

Decimal fraction include the following basic concepts:

a- Addition of a decimal to a decimal.

b- Subtraction of a decimal from a decimal.

c- Addition of a decimal to hundredth.

d- Subtraction of a decimal from a hundredth.

e- Addition and subtraction of fractions including thousandth.

f. Division of a decimal by an integer which is formed of one figure.

g. Division of a decimal by a decimal and diversified sums on these.

## 6. Rational Numbers:

The topic of rational numbers aims at the study of the different relationships of various units, i.e. changing piasters into pounds, grams into kilograms, centimetres into decimetres, days, weeks and months into years .. etc.

The study of this topic at the primary stage or at the one-classroom school is of great importance as it is an application of the arithmatical processes that have been studied, and linking them with the reality of the pupil's environment and what is used in his life outside school.

In this topic are used the basic processes of addition, subtraction, multiplication and division.

## 7. Percentage:

Of the important processes in life is the use of percentage in interests and taxes, profit and loss, absence and presence of pupils, and percentage of success in various grades. This topic is studied for the application of decimal fractions and proportions.

### 8. Proportion, Proportionate division, and Scale drawing:

The topic of proportion and its application in proportionate division and scale drawing are closely associated with the pupil's social life such as in the division of heritage, thr formation of trade companies and shops, the drawing of areas in smaller form, and finding the distance between cities through identification of the scale ratio. Hence, it is of the important topics in the one-classroom school.

### 9. Volumes and Areas:

The understanding of the areas topic helps pupils find the area of the agricultural land; volumes are important for the finding of the volume of grain stores, the area and volume of buildings, or the estimation of the amounts of various goods. Hence, the topic of areas and volumes is one of the principal topics.

### IO. Geometry:

Since long times, geometry has had its influence on our life, being related with the Nile, agriculture, and the estimation of areas ... etc. It is concomitant with the child's life since his infancy as he watches it in his toys and other surrounding things.

So, geometry is studied in the formal primary school from grade one and until grade six. It is studied in the one-classroom school in the second and third cycles. In the study of the topics of geometry, we are concerned with the basic concepts that are related with the beginnings of teaching geometry such as the regular shapes, and some simple geometrical constructions such as the diameter of the rectangle, the height of the triangle and the chord of a circle.

## Defining the Test Items

From the above analysis of the major topics of arithmetic, and the level of each process, the test items were defined by including an arithmatical sum on each level, and a sum related with pupils so that it might be possible to measure the cognitive and skill aspects as well as the diagnosis of difficulties.

## Wording of the Test:

The test is composed of 150 items, and was applied in a pilot experiment on two classes of the formal primary school. Some items were excluded ans so the number of the test items was I00 divided as follows:

(I) Addition Process at various levels and included twenty questions the numbers of which are as follows:

I - 2 - 3 - 8 - 9 - I0
II - I6 - I7 - I8 - I9 - 20
26 - 27 - 28 - 29 - 33 - 34
35.

The various items of addition amounted to I9.

(2) Subtraction process at various levels, the numbers of which in the arithmetic test are as follows: (I9 items)

4 - 5 - 6 - 7 - I2 - I4
I5 - 2I - 22 - 23 - 24
25 - 30 - 32 - 36 - 37 - 38.

(3) Multiplication process

The number of items representing various levles of multiplication was II the numbers of which in the test are as follows:

39 - 4I - 44 - 46 - 48 - 49
5I - 53 - 54 - 55 - 56.

(4) Division process

The test included I3 process representing the aforementioned levels of division, and their numbers in the test were as follows:

40 - 42 - 43 - 45 - 47 -
50 - 52 - 57 - 58 - 59 -
60 - 6I - 62.

(5) Fraction processes

The test processes that included ordinary fractions with their varied levels mentioned previously were nine, the numbers of which in the test were as follows:

63 - 64 - 65 - 66 - 67 -
68 - 78 - 79 - 80.

Decimal Fractions

The test processes that included decimal fractions were ten, the numbers of which on the test were as follows:

69 - 70 - 7I - 73 - 74 -
75 - 76 - 77 - 78.

Hence, the processes representing ordinary and decimal fractions were I9 processes.

(6) Rational Numbers

The test included only one sum dealing with rational numbers. It was no. 8I.

### (7) Percentage

There were 4 percentage processes in the test, the numbers of which are as follows:

82 - 83 - 86 - 89.

### (8) Proportion, proportionate division and scale drawing

The test included two processes on proportionate division and scale drawing, the numbers of which are:

84 - 85.

### (9) Volumes

The test included one process representing volumes, it is no. 88.

### (IO) Geometry

The principal topics of geometry dealt with elementary direct geometrical forms were seven, the numbers of which are as follows:

90 - 9I - 92 - 93 - 94 -
95 - 96.

There were also some geometrical constructions (four in number) the numbers of which in the test are as follows:

97 - 98 - 99 - I00.

Hence, the total number of geometry items in the test was II items.

## The final form for the wording of the test

After defining 100 items for the test in its first form, it was applied in a pilot experiment on a number of pupils of the formal school of levels equivalent to the three cycles. It has shown that:

(I) The 100 questions are suitable for the time allowed and it was about one hour.

(2) The pupils could read the questions clearly.

(3) Some of the pupils managed to solve the whole test.

It was thus that the test was regarded as appropriate for the pupils of the one-classroom school with its three cycles.

(4) Gradation of the questions from the easy to the more difficult was taken into consideration. Questions within each group were arranged randomly.

Hence, the test was put in its final form as is shown in Appendix No. (6).

## Application of the test

Each group of researchers got the instructions of the arithmetic test, and they applied the test on the chosen sample of the one-classroom schools and five formal ones on the basis that the first and second grades of the formal school stand for the first cycle, grades three and four stand for the second cycle, and grades five and six stand for the third cycle.

## Analysis of the test results

In our analysis of the teat results we attempted to identify the following:

(I) The extent of the pupils' efficiency in various educational levels in each item of the test.

(2) The extent of the difference between the school that includes one educational cycle and those including more than one cycle.

(3) The extent of the effect of the relationship between the teacher's qualification and the learning of his pupils.

(4) The extent of the difference between the standard of the one-classroom pupils and that of the pupils of the formal mother school.

To identify the four above-mentioned points, the following steps were undertaken:

(A) Classification of the correct answers for each question on the basis of the educational cycle. The study of the numerical data of these answers has shown the following:

I- The rise of the percentage of correct answers in the processes of addition, subtraction, multiplication and division in the third cycle.

2- The percentage of correct answers in the second cycle is higher than in the first, that the third cycle is higher than the first and the second.

3- Some answers of the pupils of the first cycle such as items no. 47, 49, 50, 5I .... were rather weak, while the answers of the pupils of the second and third cycles were high. This may indicate the gradation of the level of questions for the three cycles.

4- The percentage of correct answers in various fundamental geometry questions were high particularly for the third cycle.

The analysis of the test results has shown

I- That the continuation of the pupils in the first and second cycles has led to the mastery of the fundamentals of addition, subtraction, multiplication and division.

2- That it is hardly possible that the one-classroom school will be able to elevate the standard of its pupils unless the causes behind the committed mistakes shown in the results of the tests will be dealt with.

(B) Classification of the correct answers on the basis of the degree of the teacher's qualification, the number of educational cycles at the school for the first educational level:

From the table which shows the percentage of correct answers in each process at its various levels, the teacher who undertakes teaching (qualified teacher, teacher with a certificate but not educationally qualified, and the unqualified teacher) for the first cycle only, it is shown that:

I- The high percentage of correct answers in case of the qualified teacher at the school with two cycle.

2- The low percentage of correct answers in case of the school with three cycles.

3- In case of the technical processes that require a particular teaching style, the percentage of correct answers in the case of the qualified teacher has risen in topics like proportionate division, volumes and geometry.

### (C) Classification of the correct answers on the basis of teacher's qualification, the number of cycles at the school for the second educational level:

From the table that shows the percentage of correct answers of the pupils of the second level in cases of the the qualified teacher, the un-educationally qualified teacher and the teacher with no certificate, it has been found that there are differences in percentage according to the quality of the teacher, particularly at the schools including more than one cycle.

It also shows that, in case of the qualified teacher, his pupils answered questions on topic of fractions, rational numbers and percentage, though the number of such pupils is low. Still such topics are not of the ones studied at the second cycle.

### (D) Classification of the correct answers on the basis of the teacher's qualification and the number of cycles at the school, for the third educational level:

From the table that shows the percentage of correct answers for the third level, the low percentage in case of the unqualified teacher for the third level is clearly shown.

(E) Comparison of the results of the one-classroom pupils with the mother formal school pupils is shown in Table (5.6).

The table shows general comparison of the three levels in the one-classroom school and the mother school:

Table No. 5.6

Showing the average percentage of correct answers in arithmetic and geometry

| Level | One-Classroom School | Formal School |
|---|---|---|
| First | 9.7 | 22.0 |
| Second | 25.1 | 34.8 |
| Third | 40.4 | 63.3 |
| Total | 75.2 | 120.1 |

Table 5.6 indicates the percentage of correct answers in each level of the one-classroom school and the formal school. From the table is shown the following :

1. The rise in the percentage of correct answers in all levels of the formal school over the equivalent levels of the one-classroom school.

## Fourthly: Learning Level of Science Education

The one-classroom school aims at providing its pupils with some functional concepts associated with health and sickness, living creatures, the soil, energy, natural phenomena, as well as their acquisition of the scientific attitude and whatever may help appraise and appreciate beauty.

In this part of the chapter, we try to detect the extent to which these aims have been realized so as to feel the way to the betterment of the school's role in providing young people with scientific culture.

### Aims that the one-classroom school has to realize as regards Science education:

### Firstly: Concepts

I- That the pupil gets functional knowledge about health and sickness.

2- That the pupil gets functional knowledge about living creatures.

3- That the pupil gets functional knowledge about the soil and raw materials.

4- That the pupil gets functional knowledge about energy.

5- That the pupil gets functional knowledge about natural phenomena.

2- In both the one-classroom school and the formal school it has been shown that both schools are not up to the required standard. The percentages obtained show that both are in need of care.

**Secondly**: **Scientific attitudes**

6- That the pupil will be characterized by open-mindedness.

7- That the pupil agrees to causal relations.

8- That the pupil combats superstitions and mythical thought.

**Thirdly**: **Appraisal and appreciation**

9- That the pupil appraises the role of the teacher in daily life.

IO- That the pupil appreciates beauty.

**Building-up the test**

(A) Spiral questions were put which were associated with each aim. The upper question on the page is for the first level, i.e. first cycle, the middle question on the page is for the second educational level, i.e. the second cycle, the question on the bottom of the page is for the third educational level, i.e. the third cycle.

(B) The questions were formed in a way so that there is a prelude (or a body) for each question material, followed by two test items of which one must be correct (✓) and the other is wrong (✕) . The pupil has to mark (✓) or (✕), otherwise his answer will be taken as incorrect or unattempted.

c) In its initial form, the test was applied on Bain e--Bahrain one-classroom school at Giza. It was later refined in the light of the results of this pilot experiment and given its final form.(I)

## Application of the test

In its final form, the test was applied to a sample of (40) forty one-classroom schools and on formal mother-schools and the following points were taken into consideration in application:

(I) The researcher applying the test orients the minds of pupils to the answers by asserting that the aim of the test is not an estimation of 'success' or 'failure' as regards the pupils, but rather to identify the standard so as to be able toinnovate the methods that will make their teaching and education easy. It is not supposed that the pupil will answer all questions that require a pupil who has completed his education at the sixth grade primary at the formal schools, i.e. has completed the third cycle of the one-classroom school.

As an incentive for the pupils to give their best answer, the researcher announced to them that every pupil who answered qietly and precisely, would be given a box of biscuits, and he actually distributed biscuit boxes over the pupils, one box each by the end of the test.

(2) The researcher read in good voice and slow clear

---

(I) See Appendix No. (7)

intonation the test, one item after the other. He did not shift from one item to the next unless he felt that the general bulk of the pupils follow him.

### Marking the test

Special tables were designed for processing pupils' answers. Then answers were classified in accordance with the variables of the research as will be elaborated in the following pages.

## Results and their Interpretation

### Firstly: Relationship between teacher's qualification and the pupil's level at science education

The numerical data from the tables show that the percentage of the correct answers in accordance with the degree of the teacher's qualification, and the number of cycles in the school (one cycle, two or three) show the following:

#### (I) The question on health and sickness

The highest percentage of correct answers was (74.I%) in case of the teacher without certificate. It comes down to (72%) in case of the educationally qualified teacher then further down to (6I.I%) in case of the teacher who holds a school certificate.

This may be interpreted on the grounds that science education is associated with environmental habits and non-formal culture which calls for more attention to be directed to it.

(2) The question on living creatures:

The highest percentage of correct answers was (46.2%) in case of the educationally qualified teacher, and comes down to (42.2%) in case of the teacher who holds a school certificate, then is further down to (29.2%) in case of the teacher with no certificate.

This may be interpreted on the grounds that the educationally qualified is better able to link the piece of information with the life of the pupil who mostly lives in the rural milieu with its varied animals. This imposes the necessity of attending to the training of teachers in this aspect.

(3) The question on the soil

The highest percentage of correct answers was (57.I%) in case of the educationally qualified teacher, and comes down to (43.8%) in case of the teacher with a certificate, then further down in case of the teacher with no certificate.

This is interpreted on the grounds that the educationally qualified teacher is more efficient than others.

### (4) The question on energy

The highest percentage of correct answers was (60.7%) in case of the educationally qualified teacher, then comes down to (49.2%) in case of the teacher with a certificate, then further down to (24%) in case of the teacher with no certificate.
From hence, the importance of having a qualified teacher is shown, similar to what the previous question has shown.

### (5) The question on natural phenomena

The highest percentage of correct answers was (59.5%) in case of the educationally qualified teacher, then comes down to (46.6) in case of the teacher with no certificate, then further down to (43.5%) in case of the teacher with a certificate.

The rise of the percentage of the teacher with no certificate over the one with a school certificate is justified on the grounds that the question discusses phenomena that the pupil is already acquainted with in the general culture in his environment.

(6) The question on the extent of the open-mindedness

The highest percentage of correct answers was (40.2%) in the case of the teacher with a certificate, and comes down to (3I.9%) in case of the teacher with no certificate, then further down to (24.2%) in case of the qualified teacher.

This is interpreted on the grounds that scientific attitude in such aspect is associated with the over-all atmosphere amidst which the pupil lives.

(7) The question on causal relations

The highest percentage of correct answers was (49.2%) in case of the qualified teacher, and comes down to (38.I) in case of the teacher with a certificate, and further down in case of the teacher without certificate.

This is interpreted on the grounds that the atmosphere in which the pupil lives plays a role in supporting the attitude towards the recognition of causal relations.

(8) The question on the combat of superstitious thought

The highest percentage of correct answers was (62.7%) in case of the educationally qualified teacher, and comes down to (50.3%) in case of the teacher with a certificate, then further down in case of the teacher with no certificate.

This is interpreted on the grounds that, apart from the environmental factors, the level of the teacher's qualification has its influence as well on the formation of the scientific attitudes.

### (9) The question on the appreciation of beauty

The highest percentage of correct answers was (46.0%) in case of the teacher with a certificate, and comes down to (4I.7%) in case of the educationally qualified teacher, and further down to (I7.2%) in case of the teacher with no certificate.

This is interpreted on the grounds of the role that the environmental conditions have in the formation of beauty appreciation. The noticeable deterioration in case of the teacher with no certificate may be attributed to his low personal standard which requires that a minimum of certificate holding be required for those who are recruited to teach in the one-classroom school.

### (IO) The question concerned with the teacher's role in life

The highest percentage of correct answers was (60.8%)

in case of the teacher with a certificate, and comes down to (51.3%) in case of the educationally qualified teacher, and further down to (42%) in case of a teacher with no certificate.

The general rise in all percentages, and their variation at the same time to the nature of the age which is assumed to have its influence on the pupils in addition to the influence of the teacher.

(II) The test as a whole

The highest percentage of correct answers was (42.9%) in case of the educationally qualified teacher, and comes down to (37.2%) in case of the teacher with a certificate, and further down in case of the teacher who does not hold any certificate.

In the light of this result, it may be of importance to take the following measures:

a) Urging the teacher with no certificate to get a certificate as a preliminary step.
b) Urging the teacher who holds a school certificate to be educationally qualified, or train him on the job.
c) In all cases, the standard of all the one-classroom

school teachers has to be elevated through the provision of in-service training as will be elaborated in detail in chapter six.

## Secondly: The relation between the number of cycles in the classroom, and the learning level of pupils

The highest percentage of correct answers was 37.53% in schools with three cycles, and comes down to 27.75% in case of schools with one cycle, and further down to 17.1% in case of schools with two cycles.

The rise of the first case is interpreted on the grounds that reading and writing answers helps in the self-learning and that the older age of the pupil makes him more capable of absorbing the content of the question.

As for the rise in the percentage of the school with one cycle over the one with two cycles is interpreted on the grounds that pupils of the second cycle have not yet mastered the national language that will make easy for them self-learning to an extent that will enable the teacher to engage them in work while he is teaching to another cycle.

As for the pupils of the first cycle, they answer from the memory what they have studied because forgetfulness has not got an influence, a matter which is different from the case of the second-cycle pupils.

## Thirdly: Comparison of the results of the one-classroom school with the formal mother-school

- From the numerical data, it may be deduced that the results of the pupils of the formal mother-school are higher than the results of the pupils of the one-classroom school in each question separately, and this is attributed to the following:

a. The ease of teaching pupils of almost similar level in one-classroom in the formal school.

b. Rise in the educational qualification of the formal school teacher.

c. Rise in the teaching plan of the scientific culture in the formal school to four times the one-classroom school.

d. Availability of some laboratory potentialities in the formal school.

From these results, we come to the following data:

| Educational Level | Average percentage of the correct answers | |
|---|---|---|
| | One-classroom school | Mother school |
| First | 25.8% | 47.4% |
| Second | 28.8% | 52.6% |
| Third | 43.2% | 64.6% |
| Average | 34.93 | 54.86% |

The result cited in the above table does not mean calling for the closure of the one-classroom school. It actually undertakes a role that realises (35.93%) of the aims of science education. It is rather that we call for supporting it so that the role it undertakes will rise to a standard close to that of the formal school.

## Fifthly: Learning Level of Social Education

As one of the aims of the one-classroom school is to intensify the spirit of citizenship in the children without disregard of their Arab framework and its role in Egyptian thought, it was necessary to analyse and turn this into operational objectives, and measure the extent to which this school has realised such aims so as to identify the ways of bettering the present condition and elevating it to what is aspired for.

This part of the chapter displays these processes in methodological steps.

### Aims of Social Education:

### Firstly: In the field of cognitions, concepts and attitudes thar are related with citizenship and feeling of belongingness to the environment and the country

- Recognition of the historical and geographical features of the environment, and know their economic and human roles, fields of work, institutions and organications (post-offices, banks, co-operative societies, water and Electricity organisation, First Aid Centres, hospitals, political and popular organisations), and be aware of the services they render, ways to communicate with them and benefit by their services.

- The ability to use the map to identify the features of the environment.

- The ability to participate in some of the projects that link man with his environment, and develop in him the feeling of belongningness to it, and help his involvement in the life of his community through means such as the following:

  * Control of the traffic within the suburb in which he lives.
  * Participation in the cleaning of the school, the suburb or village, and make it beautiful
  * Participation in some health projects and simple medical first-aid.
  * Participation in fire extinguish.

- To have some knowledge about the country's constitution as regards:

  * Local administration system.
  * Concepts of democracy and its practice at school.
  * Man's rights and duties.
  * Authorities and their responsibilities.
  * People's Council: its formation and concerns.
  * Clear recognition of Egypt's geography (the land), resources, population, potentialities; and

the possibilities of developing the country's economic and human resources.

* Clear recognition of Egypt's history throughout the ages, the efforts that have been exerted by the Egyptian people for the enrichment of human civilisation, and Egypt's civilisation role in contemporary history.

* Recognition of Egypt's role throughout the ages in the protection of religious traditions, defence of the Heavenly beliefs and the rejection of the heresies.

## Secondly: In the field of Arab belongingness

- The learner's recognition of parts of the great Arab world, its economic and human character, its contemporary role in world economics, and possibility of realising the economic integration between its countries, and raising the standard of living among its individuals.
- Recognition of the contemporary history of the Arab world, the dimensions of the Palestinian case, and the national rights of the Palestinian people.

## Thirdly: In the field of belongingness to the greater family of humanity

- Recognition of the country's position within world map and the openness of the country to the outside world politically, culturally and economically.

- In the light of the set goals mentioned in the previous paragraph, the courses and school books in the primary stage of education were reviewed. Patterns of school material were defined in accordance with the above goals, and the material was worded in the framework of life situations or cognitions as a preliminary step to measure them in the test.

- Social studies in the primary stage serve general aims represented by citizenship, recognition and comprehension of geographical facts and knowledge that are related with the pupil's country and its relations with other countries as well as knowledge of the national history. Many ways of the realisation of these aims are non-school techniques without restriction to school grade.

### Building Test items for the Measurement of learning level of social education

When the above aims are translated into items for the measurement of learning level, the following points were taken into account:

(I) The test was to be made for the three levels and designed to give an answer to the following question: 'Where do the pupils stand in their social culture?' This is because the cultural aspect is reached both inside and outside the school, apart from the fact that 'Social Education' is defined through various situations that the pupil encounters through the interaction with his environment, and the social reality that he lives as well the mass-media that influence him.

(2) The educational outcomes are classified in accordance with four major groups:
facts, concepts, attitudes and skills.

(3) The building-up of the test is composed of a great number of questions that are expressive and representative of the total educational outcomes that have been agreed upon and guided by the test objectives and the possibility of eliminating some of them in the light of what a limited-scale test on pupils from various primary grades may reveal.

(4) As the principal aim of the test is the measurement of social culture among the one-classroom pupils, it is outside the realm of objectives to test the pupils' abiity to read or write. Hence, the researchers applying the test were oriented to read all the test items before all the pupils.

In the light of these considerations, a preliminary test was built up and applied on the pupils' of Bain El-Bahrain school, Giza Educational Directorate, apart from a sample from Alam El-Din formal primary school, West Cairo Educational Zone. In the light of all this, 22 questions were eliminated, then another question was eliminated at a later stage. Thus, the test got its final form as shown in Appendix No. (9).

## Application of the test

After the wording and classification of the questions in accordance with the four major groups (facts, concepts, attitudes, skills), the supervisors who were to watch over its application were given the following instructions:

I. That the appointed time for answer is no less than 45 minutes provided that each pupil has the full freedom to answer all the questions included in the test (77 questions).

2. Pupils should start their answer to the questions of the test at the same moment.

3. It is enough that the pupil writes on the front page of his answer note-book his name, and the name of his school. Supervisors have to fill in the data that the pupil may be unable to write such as

'Pupil's number in the sample', or 'School number in the sample' , ... etc.

4. Pupils have to be seated in a way that prevents the reliance of one pupil on another. Thus, adequate distance had to be left between each pupil and the others.

The test was applied on (40) one-classroom schools in various parts of the country as has already been mentioned in the previous chapter.

## The Results and their Interpretation

Each of the percentages of correct answers on each question was estimated and formed according to:

I- Each of the four areas: facts, concepts, skills and attitudes.

2- Extent of teacher's qualification.

3. Number of educational cycles at the school (one, two or three cycles).

4- Overall estimate of the test as a whole.

## Firstly: Results of the pupils in the four areas

The questions of the test were distributed into four major areas:

**Facts**: These included (44) questions, nos.

I - 2 - 3 - 4 - I2 - I3 -
I4 - I5 - I6 - I9 - 20 - 2I -
22 - 23 - 35 - 36 - 37 - 38 -
42 - 43 - 46 - 47 - 48 - 49 -
56 - 57 - 58 - 59 - 60 - 6I -
62 - 63 - 64 - 65 - 66 - 67 -
68 - 69 - 70 - 73 - 74 - 75 -
76 - 77.

**Concepts:** These included fourteen (I4) questions:

5 - 6 - II - I7
I8 - 28 - 29 - 30
32 - 33 - 34 - 39
7I - 72.

**Skills:** These included fifteen question:

24 - 25 - 26 - 27
3I - 40 - 4I - 44
45 - 50 - 5I - 52
53 - 54 - 55.

Attitudes: These include four questions:

7 - 8 - 9 - IO

When estimating the percentage of the correct answers according to the four areas, it was found that the percentage o. the correct answers in Facts was (22.7%) for the first level, (39.4%) for the second level, and (50.8%) for the third level, which means that the percentage of correct answers rises with the rise of the pupil's educational level. Also, the percentage of correct answers for the second area (concepts) rises from the first level to the second, and then to the third as the percentage went up from (13.3%) to (42.7%) and to (55.5%) respectively.

The same is found with the third area (skills), as percentages of correct answers rose from the first level (21.7%) to (39.7%) for the second level then to (54.3%) for the third level.

In the fourth area (attitudes), the percentage rose from (29.9%) for the first level, to (42%) for the second level, and come down to (41.6%) for the third level.

As for the first level:

The highest correct answers were in the attitudes (29.9%) followed by concepts (23.3%), then facts (22.7%) and lastly skills (0,7%).

As for the second level:

The highest correct answers were in the area of concepts (42.7%) followed by attitudes (42%) then skills (39.7%) and then facts.

The following table No. (5.7) shows the descending order of the correct marks in the four areas in each of the three levels separately:

Table (5.7) showing the decending order of the areas according to educational level in cycles

| First Cycle | Second Cycle | Third Cycle |
|---|---|---|
| I. Attitudes | I. Concepts | I. Concepts |
| 2. Concepts | 2. Attitudes | 2. Skills |
| 3. Facts | 3. Skills | 3. Facts |
| 4. Skills | 4. Facts | 4. Attitudes |

Table No. (5.8) shows the percentages of correct answers for each of the four areas in accordance with the three levels at the one-classroom schools and the formal schools.

Table No. (5.8) showing the percentage of correct answers

| Areas | First Level | | Second Level | | Third Level | |
|---|---|---|---|---|---|---|
| | One.cl. School | Formal School | One-cl. School | Formal School | One-cl. School | Formal School |
| Facts | 22.7% | 30.6% | 39.4% | 47.6% | 50.8% | 67.2% |
| Concepts | 33.3% | 37.3% | 42.7% | 56.8% | 55.5% | 75.4% |
| Skills | 2I.7% | 30.3% | 39.7% | 52.I% | 54.3% | 73.I% |
| Attitudes | 29.9% | 42.0% | 42.0% | 43.9% | 4I.6% | 58.3% |

The above table shows that there are constant differences in favour of the formal school in the four areas mentioned above.

An example of this is that the percentage of correct answers of the formal school in the area of 'facts' was (30.6%) while it was only (22.7%) for the one-classroom pupils in the first level. This means that the difference was (7.9%). However, such difference rises very greatly in the area of concepts in which the difference amounts to (I4.0%), and in attitudes it amounts to (I2.I%) in favour of the formal school.

In the second level, differences diminsish until they reach (I.9%), but rise in the case of concepts to (I4.I%).

As for the third level, differences are clear in each of the four areas: in facts, it is (I6.4%), in concepts, it is (I9.9%), in skills, it is (I8.8%), and in attitudes, it is (I6.7%).

Table No. (5.8) shows the descending order of the correct marks according to each of the three levels separately for the one-classroom school and the formal school.

Table No. (5.8) showing the descending order in the four areas in the one-classroom school and the formal school

| Order | First Level | | Second Level | | Third Level | |
|---|---|---|---|---|---|---|
| | One-cl. School | Formal School | One-cl. School | Formal School | One-cl. School | Formal School |
| (I) | Attitudes | Concepts | Concepts | Concep. | Concep. | Concepts |
| (2) | Concepts | Attit. | Attit. | Skills | Skills | Skills |
| (3) | Facts | Facts | Skills | Facts | Facts | Facts |
| (4) | Skills | Skills | Facts | Attit. | Attit. | Attit. |

## Secondly: Answers of Pupils in accordance with the degree of teacher's qualification

Tables show the relationship between the degree of teacher's qualification and the learning level of his pupils in the three cycles. The percentage of correct answers in 'facts' rise with the unqualified teacher reaching (34.0%) followed by the teacher with a certificate (23.6%), whilst the qualified teacher is at the bottom.

This may be attributed to the great concern which the unqualified teacher gives for rote learning especially for the pupils of the first level, which means giving all importance to hand-writing and memorization. In the second level, the case is different, as the percentage of correct answers at the level of facts was (46.1%) for the teacher with certificate, followed by the qualified teacher (37.4%), and at the end comes the unqualified teacher (33.8%), which shows that whenever the pupils proceeded to higher cycles, the importance of the teacher with a certificate is better shown, and the qualified teacher more than the unqualified teacher. Such a fact is affirmed by the percentage of correct answers for the third level pupils as the percentageof correct answers for the teacher with a certificate amounts to (58.9%) followed by the qualified teacher (52.1%), then at last the unqualified teacher (42.0%). This may be attributed to the pupils' achievement abilityincluding remembrance, and comprehension is realized as intended through a qualified teacher and a teacher with a certificate more than it is realized with the unqualifird teacher.

It is also shown from the above table that the percentage of the correct answers as to 'concepts' is closely associated with the quality of the teacher. We shall also point out to a closer relationship between the teacher with a certificate and the growth of concepts as difference becomes greater in upper levels. The difference was (28.6%) then rose to (48.9%) in the second level, and higher still to (54.8%) in the third level.

Also, the percentage of correct answers of the pupils of the qualified teacher rose from (22.2%) in the first level, to (37.8%) in the second level, and reached (39.2%) in the case of the pupils of the third level.

As for the skill level, it is shown from the above table that the percentage of correct answers rises in the case of the unqualified teacher in the first level to (30.5%), then down to (20.0%) in case of the teacher with a certificate, and further down to (16.3%) in case of the qualifed teacher. This may be attributed to the unqualified teacher's knowledge of how his pupils excel at the preliminary levels (facts, concepts, skills, attitudes), but at that level only, while in the case of the qualified teacher and the teacher with a certificate, the percentage of correct answers of the pupils are higher than in other levels. For example, the percentage of the level of skills is higher in the second level in case of the teacher with a certificate (47.9%) followed by the qualified teacher (35.6%) then the unqualified teacher (26.8%). Also, at the third level, the percentage of correct answers in case of the teacher with a certificate is (6I.7%) followed by the qualified teacher (60.2%) then the unqualified teacher (47.2%), a matter that affirms the importance of the teacher's preparation and training.

As for the area of 'attitudes', we find that the percentage of correct answers steadily rises from the first level (36.2%) to the third level (40.0%) in case of the qualified teacher.

A higher percentage of correct answers is found in case of the teacher with a certificate as it was (30.9%) at the first level, and rose to (47.6%) at the second level, and reached (49.2%) with the third level pupils, meanwhile, the percentage of the first level pupils did not exceed %, and reached its highest at the second level as it was (35.3%).

Through the comparison of these percentages, it is found that the teachers with certificate greatly excels over the unqualified teachers. This may be because the effect of the unqualified teacher ceases at the first level due to the cease of his academic growth, whilst better and quicker growth is achieved in the cases of the both the qualified teacher and the teacher with a certificate.

## Thirdly: Results of the pupils according to the number of cycles at the school

Figures of the tables show that the percentage of correct answers of the pupils in a school with one cycle or two or three varies in the four areas: facts, concepts, skills and attitudes. We find the following:

I. There is some relationship between the achievement level of the pupils, and the cycles system. This is shown by the percentages in the previous table as the achievement level rises under the one-cycle system which reached (28.5%) in the area of 'facts', but was only (12.9%) in the three-cycle system. This may point out that variation in the learning level of pupils is affected by the quality of the teachers, and his inability to regard the individual differences among them. This may be attributed to his low standard and lack of information in various methods and techniques of teaching, a matter which may widen the gap between the three cycles. This is also clear in the second level when we notice rise in the percentage of correct answers of the pupils of the one-cycle (54.0%) than in the second cycle system (37.0%) than in the third cycle system (28.5%).

However, the percentages are nearer in the third level, and variations are not pointed out. The percentage was (5I.0%) in case of the one-cycle system, (5I.5%) in case of the two-cycle system, and (47.8%) in the three cycle system.

When the percentage for each cycle-system is compared separately, we find the high percentage at the third level (5I.0%), while it was (28.5%) at the first level, and the percentage amounts to (5I.5%) in the two-cycle system in the third level, while it was (I8.5%) in the same system at the first level. Also, the percentage rises to (47.8%) at the third level (the three-cycle system) while it was (I2.9%) under the same system at the first level.

In the area of concepts, variation in the level is shown. We find that the percentage rises in the one-cycle system reaching (36.0%) while it comes down in the two-cycle system to (2I.4%) and to (I2.6%) in the three-cycle system.

The same picture is found with the second level for; the percentage increases with the one-cycle system to reach (44.5%) and comes down to (4I.9%) in the two-cycle system, and comes down further still to only (29.0%) in the three-cycle system.

The third level is almost similar as the percentage amounts to (5I.0%) in the one-cycle system, and rises to (52.5%) in the two-cycle system and finally reaches (57.5%) in the three-cycle system.

In the area of 'skills' the percentage at the first level is (36.0%) in the one-cycle system, and comes down to (2I.4%) in the two-cycle system, and comes to its lowest (I2.6%) in the three-cycle system.

The above picture is repeated in the second level and the percentage amounts to (44.5%) in the one-cycle system, then to (4I.9%) in the two-cycle system, and comes further down to (29.0%) in the three-cycle system.

Percentages in the third level are close to each other reaching (5I.0%) im the one-cycle system, then

(52.5%) in the two-cycle system, and amounts to (57.5%) in the three-cycle system. However, the percentage rises in the one-cycle system from (26.7%) in the first level, to (39.4%) in the third level.

As for the three-cycle system, it records steady rise as well, from(16.6%) in the first level to (55.0%) in the third level.

In the area of attitudes, the same picture is repeated, and variation is found in standard for; the percentage in the one-cycle system is (35.5%) and comes down to (22.7%) in the two-cycle system, and finally comes down to (8.3%) in the three-cycle system.

As for the second level, the percentage comes down from one level to the next. It reached (44.9%)in the one-cycle system, then down to (40.0%) in the two-cycle system, and finally comes down to (16.9%) in the three-cycle system.

At the third level, percentages are in contradiction in the three levels despite the existence of some similarity. The percentage is (36.5%) in the one-cycle system, (33.7%) in the two-cycle system, and is further down to (29.6%) in the three-cycle system.

### Fourthly: Over-all results of the pupils:

To study the over-all results of the learning level of social education, we come to the data of the table no. (5.9)

Table (5.9) showing the percentage of correct answers in each of the one-classroom school and the formal school

| Level | One-classroom School | Formal School |
|---|---|---|
| First | 23.4% | 32.3% |
| Second | 30.2% | 50.0% |
| Third | 51.8% | 69.4% |
| Average | 33.6% | 50.7% |

The above table shows that the percentage of correct answers in 'Social education' reached (33.6%) in the case of the one-classroom school, and (50.7%) in the case of the formal school. Similar percentages were also reached at the first, second and third levels. The table shows as well the average percentage of correct answers in the 'Social education' for each of the one-classroom school and the formal school in the three levels.

It is also shown from the above table that the differences between the percentage of correct answers in the one-classroom school and the formal school increases steadily from the first level to the third. While these differences were (8.9%) for the first level, they rose to (9.8%) in the second level, and then to (17.6%) in the third level.

The previous table shows as well the steady rise in the percentage of correct answers in the first level to the third level whether for the one-classroom school or the formal school. The percentage of correct answers in the one-classroom school is (23.4%) in the first level, and rises to(40.2%) in the second level, and to (51.8%) in the third level. As for the formal school, the percentage of correct answers is (32.3%) in the first level, (50.0%) in the second level, and (69.4%) in the third level.

One of the important results is the percentage of correct answers in the second level (50.0%), and the percentage of correct answers in the third level, both are close to each other in case of the one-classroom school.

# CHAPTER SIX

## DISCOVERING THE ATTITUDES TOWARDS THE ONE-CLASS SCHOOL

- Constructing the instruments
- The samples of the research
- Findings of the questionnaire of the teachers' attitudes towards the one-class school
- Findings of parents' attitudes
- Findings of local leaderships' attitudes
- Findings of pupils' attitudes
- The overall picture of the attitudes of teachers , parents , local leaderships and pupils towards the one-class school .

# CHAPTER SIX

## DISCOVERING THE ATTITUDES TOWARDS THE ONE-CLASS SCHOOL

The success of any school in performing its function, not only as an institution for educating the young people, but also as an irradiating spot in the local environment, aiming at lighting the road to development , depends on the extent of the acceptance of the local society and the support it offers to this school .

The one-class school is presumably based upon the private popular effort , and hence it becomes organically related to all classes of the local environment.

Consequently , it has become important that we should attempt in this research to find out the attitudes of the pupils , teachers , parents and local leaderships towards it .

### Instruments of the research

In order to discover these attitudes , four questionnaires have been designed specifically for this research :

(1) A questionnaire to discover the attitudes of teachers towards the one-class school .

(2) A questionnaire to discover the attitudes of parents
(3) A questionnaire to discover the attitudes of local leaderships
(4) A questionnaire to discover the attitudes of pupils.

Every questionnaire was designed independently , so that every group of questions should deal with one specific aspect . In other words , the items were classified into groups or clusters as seen in handling the data . However , the questionnaire itself includes a random distribution of items .

A pilot trial of the questionnaire was undertaken at Bein El Bahrein school in Gisa educational directorate . Accordingly , the language of many items was modified . Another pilot trial of the modified version was attempted , and slight modifications were introduced . The final versions of the questionnaires can be seen in the Appendices of the research .

## The sample

The instruments of the research were used in the forty schools representing the sample of the research. Table (6:1) shows the numbers of the sample .

### Table (6:1)

**Showing the numbers of the sample**

| Sample | Number of respondees | Accepted responses |
|---|---|---|
| Teachers | 43 | 42 |
| Parents | 98 | 84 |
| Local leaderships | 100 | 90 |
| Pupils | 316 | 286 |

### First: Results of the questionnaire for teachers' attitudes

Table (6:2) gives a description of the sample of teachers answering the questionnaire

| Item | Numbers |
|---|---|
| SEX | Males : 39 Females: 3 |
| QUALIFICATIONS | None : 8 Primary Certificate :6<br>Prep.Cert. :3 Second.Cert. : 14<br>Institute :9 Univ.Degree : 3<br>Holders of educational qualifications besides previous ones : 5 |

Table (6:2) (contd.)

| Item | Numbers |
|---|---|
| PERIOD OF TEACHING | This year only 14<br>Since last year 8<br>Before last year 20 |
| SCHOOL LOCATION | In a small village (population less than 1000) : 31<br>In an ordinary village (population from 1000-15,000): 8<br>In a town (population more than 15,000) : 1 |
| RESIDENCE | At the place where the school is located : 28<br>At another place : 14 |

(1) Concerning the attitudes of teachers towards the one-class school

The questionnaire of the teachers' attitudes has revealed the following :

- 100% of the sample believe that the school benefits the pupils . In fact , these schools are the only outlet for educating the children in their distant areas .

- 76.19% believe that a formal school is better than a one-class school , since human and material facilities are available at the former school.
- The remaining 23.81% of the sample believe that the one-class school has the advantage of being very close to the houses of children , and of being of small density , of having a teacher who is usually dedicated to his work , for two-thirds of the sample of teachers who live in the same locality of their schools are relieved of the problems of transportation.
- 42.86% agree to being transferred to a formal school, for they believe that teaching in a homogeneous class is more comfortable . Besides , the status of a teacher in a one-class school is rather low .

On the other hand , the remaining 57.14% agree that they have other indispensable commitments . Besides , some of them are waiting for an appointment in another job for which they have the qualifications, according to the Egyptian laws which provide for the appointment of all graduates holding university or technical qualifications .

- 85.72% agree that the weekly study plan is quite adequate . Some of them do other jobs besides teaching , and have no enthusiasm for increasing the weekly plan .

On the other hand , those who disagree , express their doubts that allocating one lesson a week for science , as well as another one for social sciences will not be enough to achieve the objectives of teaching them .

(2) Concerning the attitudes of teachers towards the general system of the school

- 30.95% believe that some old pupils may annoy younger ones with their jokes . However , 69.05% believe that the majority of the children are relatives and live together inside the one-class school as well as outside it .

- 57.14% agree to the unification of the school uniform , so that there may be no economic discrimination among children . The remaining 42.86% believe that over-burdening the poor parents by compelling them to buy a school uniform , may impel them to stop their children from going to school , unless they get the school uniform free of charge .

- There is a good sign that only 9.52% of the sample agree to the principle of beating the children. A follow-up of these four cases has revealed that they were new graduates , working temporarily in a one-class school until they would find the opportunity of being appointed -- as they claimed -- in a suitable job . Besides , their pupils didn't like them.
- One teacher (representing 2.4% of the sample) wants to deal with the parents , for -- as he imagines -- he is performing his mission in combating illiteracy by teaching reading and writing only , and that the parents are ignorant and do not know anything . Such teacher needs a kind of orientation so that he may understand the dimensions of combating professional illiteracy and the importance of strengthening relationship with parents .
- Only 33.33% of the sample believe that teaching at a one-class school is more comfortable than teaching

at a formal school , since they enjoy the freedom of beginning and ending a teaching session , as well as dealing with a small number of pupils . Besides , they do not find difficulty in going to school .

On the other hand , those who disagree believe that the differences in the standards of the pupils in their schools require a quick and constant follow-up .

(3) Concerning the attitudes of teachers towards the daily system

- 78.57% believe that young children cannot stand studying for the whole day . Besides , the teachers themselves have their own private problems , as well as various jobs for which they need the whole day. On the pther hand , those who disagree to this are influenced by religious education , which was prevailing in Egypt until the nineteenth century and the beginning of the twentieth century . In keeping with this spirit , an Arab poet is often quoted as saying: "Stand up in full respect for the teacher , for he is almost a prophet."
- All one-class schools have two hoildays a week ,

one on Friday and the other on the market day . However, if on an environmental occasion there is a local holiday, the teacher himself , even before his pupils , will be absent for being one of the local leaderships in these villages and hamlets . That is why 73.81% of the sample agree to the idea of absence on different occasions . On the other hand , those who disagree imagine -- as they say -- that their pupils never lose interest in learning at school out of love for their teacher and school .

- 54.76% of the sample believe that it is necessary to have a bell in a one-class school , for this will announce in the environment :"Here is a school !" , "Here is intellectual irradiation" , "Here is a teacher who lights the way for the coming generations !" . On the other hand , those who disagree to the idea of having a bell at school (45.24%) believe that the hamlets in which they work have a limited number of people and it is quite easy to call out to the children . Even , if the teacher merely stood at the entrance of the school , this would be announcement enough of the beginning of the school day . This will soon spread all over the hamlet , and the children will rush quickly to school .

- 88.10% of the teachers of the sample believe that the freedom of the teacher in going into detail , or in being brief in every lesson regardless of the time fixed for every class will be of great benefit to the teaching-learning process . However , 11.90% of the sample believe that it is necessary to stick strictly to the allotted time in order to avoid any excessive extension of another aspect of the syllabus .

(4) Concerning the attitudes of teachers towards Curricula

- Examinations under the present system of the one-class school , are held under the supervision of the mother school or its nominee . One of these examinations is held in February and the other in May , every year. According to the result of the examination , the pupils are placed in the first , second or third cycle. However ,47.62% of the sample give priority to monthly tests on the assumption that promotion from one cycle to another can take place any time the results of a pupil justify it . Some teachers suggested that promotion should be based on the average marks obtained in months preceding February or May .

- A percentage of teachers ranging between 35.72% & 23.81% do not feel happy about the present examination system . However , they have not given any alternative, probably because the standard of their professional preparation is not adequate .

- 100% of the sample have agreed that one of the roles of the school is to teach the pupils how to deal with others . Besides , 30.95% believe that the role of the school should be confined to teaching the children the 3 R's (Reading , Writing and Arithmetic) . Also 61.90% of the sample agree to the introduction of some industries into the curriculum . 83.33% agree to the organization of school parties . 92.86% agree to the teaching of oration . 92.86% are on the side of adding the subject of home- economics . 95.24% are in favour of teaching songs because they appeal to the young children . All the subjects of the sample believe that one of the roles of the school is to guide the pupil and his family to cleanliness , the importance of looking after appearance and personal clothes . 92.85% welcome the idea of consolidating the team spirit among the young children .

All these percentages are good indicators of the belief of teachers in the role of the school in achieving comprehensive education which develops personalities , integrated intellectually , emotionally and behaviourally .

- 64.29% of the sample believe that textbooks are adequate and they are quite satisfied with the explanation of the teacher with the help of the existing textbooks . However , we may benefit from those who disagree , in spite of the fact that they are not the majority (about 35.71%) . Since some of them are novices , they believe it is important that special textbooks have to be written for the one-class school in line with the shortened study scheme which includes 5 teaching sessions for Arabic , 5 for arithmetic , 4 for religious education , one for each of social subjects and sciences . They believe the new textbooks have to be directly related to the specific objectives of each subject and should be interesting to children .

**Second : Results of the questionnaire for parents' attitudes**

Table (6:3) indicates the specific items characterizing the sample of parents (84 persons) who responded to the questionnaire .

| Item | Numbers |
|---|---|
| SEX | Males:78 Females:6 |
| OCCUPATION or STATUS | Omdas (Mayors)/ Village Sheikhs:4 , Dignitaries:34 , Officials:6 , Ordinary Citizens:40. |
| LOCATION OF WORK | Hamlets:78 , Villages:6 , Towns:0 , Capitals of Governorates:0 . |
| QUALIFICATION | None:72 , Primary Certificate:10 Prep.Cert.0 , Second.Cert.:2 , Diploma:0 , University Degree:0. |
| RESIDENCE | The same place where the one-class school is 80 , In another place : 4 . |

According to data from Table (6:3), it is evident that:

- Sex is not a significant factor , for those who were present at the time of the experiment were called . However , the majority of occupations or status of parents show that they are ordinary citizens , that is to say , poor farmers or workers hired by others . This indicates the socio-economic status to which the pupils belong . But , the dignitaries amounting to 40.48% are small landowners , which means that the one-class school includes poor children , because rich people can afford to transport their children to formal schools away from their villages .

- All children in the sample live in hamlets and villages , which indicates that concerning the general economic standard , they are less than some of the children in formal schools in towns .

- 95.24% of the parents live in the same area where the one-class school is located . Only 4.76% live in other areas . When the conditions of the latter parents were examined , it was found that they lived in villages that are only half a kilometre away from the one-class school . It was inevitable that the children should be sent to such school since their original villages were no more than a group of houses not exceeding thirty .

### (1) Attitudes of parents towards the importance of the one-class school

Gathering the scattered items in the questionnaire in one cluster dealing with the importance of the one-class school , it has been possible to get the results indicated in Table (6:4)

| Serial Number in Questionnaire | Item | Agree | Percentage |
|---|---|---|---|
| 1 | I believe that the one-class school is better than no school | 84 | 100 |
| 5 | I prefer that the one-class school should continue | 84 | 100 |
| 11 | The one-class school helps us in the problems of our children | 82 | 97.62 |
| 15 | I believe that our chidren learn something useful in the one-class school | 71 | 84.52 |

A discussion of the data in Table(6:4) reveals the following :

- All the subjects of the sample agree that the one-class school should continue , and that it is better than nothing , for it is the only outlet that would protect their children from illiteracy . There is no other alternative for such a school . Hence , it is essential that ways of improving it should be sought.

- 97.62% of the sample believe that the school saves them from the problems of their children which are caused by playing in streets and bothering the old people , which may lead to quarrels . Only 2.38% of the parents object to this , saying they don't believe that their children cause any problems. **

---

** Some parents expressed this meaning by using such popular expressions as :"Our children are like angels " / "They are like an ointment that would heal a wound !" .

- 84.52% agree that the school teaches their children something useful .

In the present research , it may be useful to know the opinions of those who disagree , who are looking forward to the consolidation of the curricula of the one-class school by introducing some activities , and by increasing the study scheme in order to intensify the understanding of children .

(2) Concerning the attitudes of parents towards the general system of the school

The results of the attitudes of parents towards the general system of the school have revealed the following:

- 40.48% believe that the presence of children of different ages together spoils the younger ones . They suggest that there should be two classes : one for boys and the other for girls . This was quite evident in areas near the desert in Fayoum . On the other hand , the 59.52% who object to this , argue that the majority of boys and girls are relatives or belong to families among which love prevails . Some members of the field research team saw boys and girls completely naked and swimming together in the canal without any feeling of fear or embarrassment . In this area , the parents preferred having two classes in the school : one including the children of the grades 1 , 2 and 3 primary , and the other including grades 4 , 5 and 6 .

- 75% believe that beating can be one of the tools to impel children to study , for they believe that fear of being beaten while young , will make the child form good habits of studying and going to school regularly , so that when he grows up , he will depend upon himself . The stick will therefore become an internal motive that would motivate him to accuracy. On the other hand , those who disagree believe that reward (through using encouraging words) or gentle blame will make the pupil fond of his teacher and the subject the latter teaches . Concerning this item , two are undecided and state that it is not a matter of beating or coaxing , but the most important thing is to educate the child , for there are situations in which a stick is indispensable , and others which require coaxing and diplomacy .

- 100% of the sample agree to the importance of getting to know the school teachers in order to discuss with them issues concerning their sons and daughters . It is interesting to know that they say that there is need for this question , because if the teacher does not come from the area , he at least comes from a neighbouring village and has some kind of relation with all the villagers , even if it is a small one .

- 98.81% agree that the school improves in the presence of the supervisor , for the teacher tries to prove his proficiency . The only one who disagrees believes that the teacher's conscience is the only supervisor , for if he doesn't have this conscience , any inspection , reward or punishment will be of no use .

(3) Concerning the attitudes of parents towards the daily system

- 30.95% agree that the school doors should be opened from sunrise to sunset as an expression of parents' love and enthusiasm for the education of their children because they agree with what John Locke said that "the mind of a child is a white slate which should be filled with knowledge" . On the other hand , the majority who disagree give the following arguments :

a. There is no teacher who accepts this .

b. It is unbecoming to overburden an old man .

c. The kids are too young to stand all this .

d. Ask for the possible , if you want to be obeyed .

- 80.95% agree that vacations should not be too long, for some pupils are too young to be productive . Besides , some one-class schools are found in areas that grow a special perfume plant which does not need great care . Therefore , the vacation should be short. On the other hand , the 19.05% who disagree , live in areas where cotton is grown and therefore children , especially the short ones, are needed to pick cotton worms from the leaves of young cotton plants .

- 66.67% agree to the idea that vacations should agree with seasonal occasions , for they are sacred . Besides, times for gathering or picking the crop need that the pupils should help their parents . The 33.33% who disagree , believe that they hope to see their children become doctors , engineers , officers and teachers ...., that is to say , distinguished people . This cannot be achieved except by shortening vacations in order to make pupils study as full timers , regardless of seasonal or local occasions .

- 71.43% agree to making a school day extend from morning to noon only , so that they may get used to the idea that the school day covers this period specifically . The 28.57% who disagree believe that the teacher of a one-class school could be an official guard(ghaffir) who has a night shift , or a government official in the morning , therefore , classes should start in the afternoon (2 p.m. -- 5 p.m.) . They believe that it is important that pupils should study inside the school for half a day , not necessarily from morning till noon.

(4) Concerning the attitudes of parents towards curricula

- Only 15.48% of the sample agree that the role of the school is merely to teach reading and writing , and they believe that this is the first step on the right road towards self-instruction . The 84.52% who disagree, believe that education lacks other cognitive , affective and psychomotor aspects .

- 96.43% agree that the school should teach the young how to read the newspaper and how to write letters and application forms. Those who disagree -- three parents only -- believe that this operational objective is not up to their aspirations for the education of their children , because they have pinned greater hopes on this question .

- 97.62% of the sample agree that children should learn etiquette . The two parents (representing 2.38%) believe that education means reading and writing , which in their opinion is enough to open "the insight" of the child.

- 61.90% agree that a child should learn a trade or an occupation . Besides , 38.10% agree that hobbies should be learnt , for this would be beneficial to the abilities of a young child . On the other hand , those who disagree believe that this may not realize their hopes that their children should become doctors , engineers or judges , because they imagine that such respectable professions are associated with writing , reading and studying in textbooks .

- 55.95% agree that the school should teach the children the harms of some traditions , for such traditions would not be understood by young children. However , it may be interesting to note that those who agree as well as those who don't have one rationale, that traditions have a function which should not disappear . Nevertheless , some subjects of the sample disagree about the issue : should we teach this to the children or not ?It might be worthwhile noting that one of the parents stated :"A child should know that sooner or later he would die and would be buried in a grave , so he shouldn't be a bully" .

- Parents differ about school activities . 95.24% approve of parties ; 82.14% approve of journeys ; 83.33% agree that girls should learn home-economics ; 97.62% agree to paying visits to institutions in the environment ; 59.52% agree to learning songs and music ; 25% approve of playing , and 89.29% agree to the necessity of increasing home assignments , so that a young child should not play about . However, those who are in favour of activities other than reading , writing and arithmetic believe that the educational process is an integrated process which aims at the formation of an integrated citizen . On the other hand , those who disapprove of school activities , are afraid that this may be at the expense of school subjects , especially that the study scheme is only 16 hours a week . Some of those who disagree , welcome the idea of introducing such activities if the study scheme is increased , and if there are guarantees that the teacher should not carry activities too far and leave the first task of the school which , in their opinion , is success and obtaining a certificate . This attitude is confirmed when we realize that all the subjects of the sample believe that it is important to get a certificate indicating the completion of learning in the one-class school .

- 92.86% agree that the teacher should explain the meaning of the most important current news in the newspapers and on the radio, for this will broaden their horizons . In fact , the worry of parents is a unique indicator of the enthusiasm of the Egyptian society for education which pushes the individual forward and to progress .

- All the sample agree that the teacher should direct the parents as to the importance of washing the clothes of their children , looking after their cleanliness and appearance for this is to the benefit of their children .

- 77.38% of the sample agree to the inculcation of the team spirit in the children , for this will make them compete in learning , and because man is by nature a sociable being . In this item , four parents (representing 4.76% of the sample) are undecided , for they state that they do not object to the spirit of friendliness among children , provided the child's friends belong to the same village . On the other hand , those who disagree (representing 17.86% of the sample ) quote the Arab popular poet Bairam El Tunsi when he says "Keep away from people , and you will save your honour and money".

## Third : Results of the questionnaire of local leaderships towards the one-class school

Table (6:5) indicates data characterizing a sample of local leaderships who responded to the questionnaire about attitudes

| Item | Numbers (90) |
|---|---|
| SEX | Males:88 , Females:2 |
| OCCUPATION / STATUS | Omdas (Mayors) or village Sheikhs:22 , Dignitaries:45 , Officials:23 . |
| LOCATION OF WORK | Hamlets:70 , Villages:16 Towns:4 , Governorates' Capitals:0 . |
| QUALIFICATION | No:62 , Primary Certificate:8, Prep.Cert.:0 , Secondary Cert.:10 , Instiute (Dip.):8 , University Degree:2 . |

Table (6:5) reveals the following :

- The sample includes 2.22% females who are old women , respected by all the people in the village .

- The sample includes 25.56% officials who get salaries. They work as workers in nurseries such as those in

Kom Oshim , Itsa , etc ... , or janitors working in a health unit or a school .

- The majority of subjects in the sample work in the same hamlet or village where the one-class school is located . Those who work in a nursery or institution do not work more than a few kilometres away from their village .

- Most of the local leaderships (68.89%) do not hold any qualifications . However , they have their prestige and are held in esteem by others for their old age and experience . The work team met two Omdas (Mayors) who were holders of B.A. in Law , and preferred to stay and work in agriculture and trade in their villages rather than work in any job for a fixed salary . Both had certain opinions and aspirations more than the other subjects of the sample , as will be seen in the following analysis :

(1) Concerning the attitudes of local leaderships towards the importance of the one-class school

- All subjects of the sample (just as those of parents) agree that a one-class school would be better than nothing . It has been established to continue , for it is the only window that would let in the rays of light and knowledge .

- 45.56% of the sample believe that a one-class school is worse than an ordinary formal school as far as facilities are concerned . Those who disagree believe that it is better than a formal school , concerning the feeling of friendliness between pupil and teacher, since the latter , more often than not , comes from the same area .

- 73.33% are in favour of changing a one-class school into a formal school in order to enjoy meals besides the facilities of seats , chairs , instructional materials and efficient teachers , etc ....

The others (26.67%) who are not in favour , are afraid that a teacher who is a stranger may not care for the children , for teachers in formal schools in distant areas may originally come from towns and are too burdened by their private worries to do a good job or to be regular in their work .

- Only 11.11% of the sample believe that a one-class school is merely a place for accommodating pupils , for they believe that a school is merely a bell ,, some desks , a headmaster and some teachers . On the other hand , the 88.99% who disagree believe that there is fairly good instruction at such a school , since some young pupils have continued their education in the preparatory stage after finishing the courses of the primary stage in the one-class school .

(2) Concerning the attitudes of local laederships towrads the one-class school

- 61.11% of the sample agree that having young pupils side by side with older ones does not do any harm for they are all relatives , and because their villages normally consist of about fifty families and are closely related to each other both inside and outside school. However , the 38.89% who disagree , believe that there is a possibility of arousing some sexual problems .

- 44.44% believe that a pupil should not be beaten in order to study , since beating will lead to cowardice and will kill initiative . However , those who approve of the principle of beating -- we are sad to say -- include the two educated Omdas who are holders of B.A. in Law . They believe that they have been well educated because of having been beaten .

- 93.33% agree that inspection is important for the improvement of the work , according to what usually happens when an inspector arrives at school , for the teacher at once cleans the place where he teaches, and does his best to make the pupils memorize the lessons . One of the leaders said that the presence of an inspector would be felt whenever the children's voices grew louder as they recited songs and readings.

The 6.67% who disagree , believe that , just as some parents believe , a teacher's conscience and social and moral enthusiasm are the basis of good work.

- 97.78% believe the school uniform should be unified, so that pupils may be seen going to and fro in the village , and so that there should be no economic and social differences among the children . On the other hand , the remaining two (2.22%) were undecided , for they said that they agreed to the unification of the school uniform . However , this might impel parents to withdraw their children because of their financial inability to do this . Therefore , if the government undertakes giving the unified uniform , it will be a good blessing .

(3) Concerning the attitudes of local leaderships towards the daily system

- 86.67% are in favour of shortening school vacations, for " a vacation will lead to forgetfulness of learning " , " a vacation will spoil the young and will inculcate loafing about in the village" .

On the other hand , those who disagree — including the two educated Omdas — believe that their crops need cheap manpower , and these young pupils are cheaper than grown-ups , therefore , vacations should be lengthened enough to agree with times of gathering crops and vegetables and combating agricultural pests.

- 23.33% are in favour of a long school day . When aked why, they stated that learning the Holy Koran requires a long time , hence , the idea of the old Kottab (elementary school) was always associated with religious education , whereas the one-class school is the school of life and of work , and it is an Egyptian creation which proves that the Egyptian people are determined , in spite of all economic sufferings and of struggling with odds , to educate their children , by all means . However , those who disagree to a long school day , believe that , like parents , teachers won't agree . Besides , young pupils won't stand it .

- 46.67% agree to linking school holidays to local conditions , so that a young pupil may absorb the customs of his family , and so that he may have the opportunity of earning a living whenever favourable situations may occur .

The 44.44% who disagree, believe that young pupils have to learn only , and should have nothing to do with local conditions .

The undecided , representing only 8.89% agree to linking holidays with feasts and seasons of picking cotton , but object to having a holiday on a market day , for a child's role in this area is not so important.

### (4) Concerning the attitudes of local leaderships towards the one-class school curricula

- 40% agree to the role of the school in teaching reading, writing and arithmetic , since this will "open the eyes of the child" , and this is quite enough . But , 55.56% of the sample believe that the needs of a village require an enlightened citizen . For example , political meetings require a person who knows how to analyse , compare and read the news and events .

In between those who agree and those who don't , we have 4.44% who are undecided and who believe that the role of the school should extend to some trades or some activities . That is why the opinion of those who are undecided , was evident in the item of the extension of the role of the school to include teaching some trades and industries , for 74.44% agree to this , whereas 25.56% don't agree , for they imagine that this might stop the pupil from continuing his education , for technical and vocational education in Egypt has almost led to a blind alley , and has not enabled graduates to continue university education , except according to requirements which are very difficult to fulfil for the majority of them .

- 70% agree to the importance of giving the pupil a certificate indicating the completion of education at the one-class school , which would serve as a means to continue education in town . The remaining others object to this , on the assumption that having no certificate would make them work in the village , thus the local leaderships would benefit from them as manpower working in their agricultural land .

- There has been a variety of opinions among local leaderships towards the roles of the one-class school. 60% believe that among the roles of the school would be orientation towards not sticking to old customs, for this would develop the village . On the other hand, those who disagree , believe that the role of the school is only to teach the skills of reading , writing and arithmetic . Besides , 82.22% are in favour of parties , and 77.78% are in favour of journeys. 84.44% welcome visiting local institutions . 78.89% are in favour of discussing current events . 68.89% are in favour of the teacher directing pupils to caring for personal cleanliness and appearance . 31.11% are in favour of pupils co-operating with their teachers to clean the school neighbourhood . They believe that such activities will lead to good upbringing of pupils and will make them have a sense of belonging to their hamlet or village .

On the other hand , those who disagree to these activities , justify their disagreement by such excuses as : the image of a traditional school as a textbook, a pupil , a teacher , chalk , etc .... , is an ideal one, and this — according to what they say — prepares great men . Besides , such activities will take children away from memorization and learning . Besides , on of them said ,"Education is not an easy task , but it is nothing but rote learning " . All such opinions justify the role of political and social organizations in Egypt in enlightening grown ups as to the fact that education is not merely memorization and knowledge , but there are also affective and psychomotor aspects which are not fully recognised by some local leaders .

## Fourth : The attitudes of pupils towards the one-class school

The study aimed at finding out the attitudes of the oldest pupils in the one-class school towards their school . 316 pupils responded to the questionnaire ; but 30 responses were excluded because of lack of seriousness on their part . The remaining 286 responses have been tabulated and the results that could be gleaned from them are as follows :

(1) Concerning the attitudes of pupils towards the teacher - 80.42% agree to be teachers , for some of them look upon teachers as being most of the time in the position of leadership . Some others consider the teacher better off , if compared to their own parents . 45 (representing 15.73%) disagree because they aspire to a more glamorous occupation , such as : doctor , officer, engineer . The undecided -- 9 (representing 3.15%) -- believe they are still young , and "whatever God ordains for us , is always a blessing" , "There is no need for anticipation" .

- if the teacher is changed , 41.26% will be sad , whereas 19.93% will be pleased . This reveals how far the pupils of a one-class school are fond of their teacher , for most of these teachers belong to the same village and have relationships with the pupils' families and show paternal feelings towards the children . Most of those who will be glad to see the teacher changed , justify this feeling by referring to his cruelty and his intentional beating of anyone who does not study the lesson , or to his irregularity in opening the school because of living in another village , and may be reluctant to come , especially when the weather is bad and transportation becomes impossible . This love the pupils have for their teacher is confirmed when we see that only 25.17% feel that he annoys them . During the field work in the research , the field researchers noticed that most of the pupils expressed their love for their teacher in an innocent childish way , unparalelled in the formal mother school having six grades .

- 80.42% of the pupils believe that the teacher encourages them to work , and that 97.55% believe that the teacher is interested in correcting their notebooks .

Actually , the field researchers noticed that most of the pupils' notebooks included home assignments which had red marks indicating that the teacher had gone through them . Consequently , only 16.08% were afraid of asking the teacher . In fact , they are concentrated in a small number of schools in which there are some cruel teachers , who are new graduates working temporarily in teaching and waiting to be appointed in jobs commensurate with their qualifications . If 12.94% were afraid to be asked by the teacher , this might be due to the fact that the teacher was cruel , or that the pupil was not ready on that day , according to what they actually said.

(2) Concerning the pupils' attitudes towards their colleagues and the class atmosphere

- 80.42% like to keep the company of their colleagues, and 85.66% are proud to be pupils in the school , besides the fact that 92.66% wish to see other people say that their school is excellent . Moreover , 94.41% like to repeat that they are happy at school . These high percentages are against low percentages in the opposite direction , for 18.88% wish to leave the school as quickly as possible . 5.24% feel ashamed of belonging to the school , in addition to 3.85% who imagine that they will be happy when they leave this school . Besides , 24.13% believe the school is not of much benefit to them .

All these are considered important indicators of the fondness of the majority of the school pupils of their colleagues , and the atmosphere inside their one-class school . There are several justifications for the prevailing positive attitudes , some of which may be as follows :

- Young pupils will feel lost , if there is no one-class school , for their parents are busy in the fields and in managing their own affairs , leaving their children in the village barn or in the lanes .

- Some pupils say that the time of study is short and nice and better than the formal school , because they have learnt from the adults in the village that the teachers of the formal school are usually hard-hearted.

- The villagers look at their children with admiration and approval , when they see them carrying their books and notebooks in a cloth bag which is quite in keeping with their poverty . It is usually made of cloth such as a pillow case to replace the expensive bag . The children feel proud when their families praise them , and may even call them "a young engineer" or "the future doctor" , etc ... .

On the other hand , the justifications for the opposite attitudes , in spite of being fewer , have to be taken into consideration . They include the following:

- Those who wish to leave the school as soon as possible, mostly come from schools which have cruel teachers .

- Those who feel ashamed of their school , look forward to a school "with a unified uniform" , "with a bell" , "with lines and flag greeting" , about which they read in reading books .

- 24.13% believe that their school does not benefit them very much , expressing their looking forward to a better standard of education . It has been noticed that some of the respondees are younger brothers of people who have continued their education in the secondary stage or the university . That is why the young pupil compares what he sees with his older brother and what he hears from him concerning the possibilities of the formal school .

- 78.32% believe that their neighbouring friends wish they could join their school , which indicates the good prestige enjoyed by the one-class school in distant hamlets and villages . Besides , there is no other window through which education can enter into these areas except the one-class school .

On the other hand , some of those who disagree , believe their village is small , and all the children are at school . Therefore , the question is irrelevant. Some others say that their neighbours prefer the mother school with six grades , despite the hardships suffered by the young pupils in going there[**].

(3) Concerning the pupils' attitudes towards the school system

- 4.90% like to see the holiday extending for so many days , and 8.39% rejoice when there is a holiday , for those respondees are either from areas in which cotton is cultivated and the holiday is associated with daily earnings for the pupil (10 — 20 piastres), or because the teacher tends to be cruel . The evidence for this is that the answers of the subjects of this sample are concentrated in certain schools . But , those who reject these two items , either enjoy teaching in the one-class school , or the holiday is associated with hard work which is boring to the child . Besides , some children who wanted to continue education without holidays , were found to have great aspirations .**

---

[**] Dr. King saw , during his visit to the mother school, that five of the first grade pupils came walking every day on foot from places which are five kilometres away , with their grown-up brothers or relatives , and refused to join the one-class school , for they imagine that designing the future of the doctor , the engineer , the officer , etc ... , begins from the formal school .

- 6.29% expect the school day to come quickly to an end. They justify their point of view either by being fed up with squatting all day , or being beaten by the teacher, or feeling hungry during the school day .

On the other hand , those who wish the schoolday wouldn't end quickly (representing 67.13%) , look upon the school as a comfortable place for them , and the only resort to achieve their aspiration for continuing education , and getting a comfortable and profitable job .

---

** So that they may be like Dr.Sophy Abu Taleb , the Speaker of the Egyptian People's Assembly , who comes from one of the villages in which the study was conducted .

- 59.09% believe that the school would be better if some activities were introduced into it , because of their feeling of boredom as a result of devoting all the school day to reading , writing and arithmetic . But , those who disagree (108 pupils , representing 37.76%) , believe that activities have nothing to do with success at school , and promotion from one level to another .

The undecided (9 pupils , representing 3.15%) , believe that there is no objection to studying anything , if this will contribute to their success and future ; but they would reject any subject that would not affect their educational position .

### (4) Pupils' attitudes towards school subjects

Table (6:6) indicates numbers and percentages of those who agree to every item related to pupil's attitude towards school subjects .

| Number of Item | | Reading | Calligraphy & Writing | Arithmetic | Sciences | Social Subjects | Religious Education | Sports |
|---|---|---|---|---|---|---|---|---|
| 25 I like to attend a class in | Number<br>% | 158<br>55.24 | 62<br>21.68 | 138<br>48.25 | 54<br>18.88 | 45<br>15.73 | 120<br>41.96 | 17<br>5.94 |
| 26 I believe I understand the subject of | | 159<br>55.59 | 64<br>22.38 | 114<br>39.86 | 57<br>19.93 | 42<br>14.67 | 89<br>31.12 | |
| 27 I believe I don't understand the subject of | | 13<br>4.55 | 11<br>3.85 | 37<br>12.94 | 59<br>20.63 | 56<br>19.58 | 40<br>13.99 | |
| 28 I believe the best book is that of | | 162<br>56.64 | 15<br>5.24 | 61<br>21.33 | 32<br>11.19 | 11<br>3.85 | 118<br>41.26 | |
| 29 I believe the most difficult subject is | | 43<br>15.03 | 20<br>6.99 | 38<br>13.29 | 72<br>25.17 | 63<br>22.03 | 22<br>7.69 | |
| 30 I believe the easiest subject is | | 133<br>4.50 | 29<br>10.24 | 57<br>19.93 | 32<br>11.19 | 14<br>4.90 | 81<br>28.32 | |
| 31 I like to do best in the subject of | | 125<br>43.71 | 30<br>10.49 | 84<br>29.37 | 13<br>4.55 | 13<br>4.55 | 58<br>20.28 | |
| 32 The best explanation is in the subject of | | 94<br>32.84 | 18<br>6.29 | 72<br>25.17 | 27<br>9.44 | 24<br>8.39 | 79<br>27.62 | |
| 33 I am not afraid of being examined in | | 111<br>38.81 | 37<br>12.94 | 68<br>23.78 | 16<br>5.59 | 10<br>3.50 | 94<br>32.87 | |
| 34 I am absent-minded during the class of | | 11<br>3.85 | 1<br>0.35 | 50<br>17.48 | 24<br>8.39 | 84<br>29.37 | 29<br>10.24 | |

A discussion of the data in Table (6:6) reveals the following :

- The school subjects according to the interest the pupils find in attending classes in them , may be arranged in the following order :

reading , arithmetic , religious education , calligraphy and writing , social sciences , then sports . Priority was given to reading and arithmetic because concentration in the one-class school is always on them . Then religious education follows because it is easy to teach in the form of stories or reciting the Holy Koran . But , calligraphy and writing require an effort from the child . Sciences and social subjects are among the most difficult subjects even for most of the teachers themselves . Hence , it is necessary to prepare and train teachers to undertake the task of teaching them .

Sports were mentioned by a sample of boys only , and in one school , because these pupils form two teams of popular football (in which the ball itself is made of old socks) , with their neighbours and they like to see their matches part of the school activities , instead of the free ones . So , they express wishes for actual activities in the school .

- According to the understanding of pupils , the subjects are arranged in the following descending order : songs , reading , arithmetic , religious education , writing , sciences , then social subjects. The rationale given for this order is the one mentioned before .

- According to the best textbook , the subjects are arranged in the following descending order :

reading , religious education , arithmetic , sciences , calligraphy and writing , and finally social subjects . The pupils believe that the reading textbook includes many interesting pictures . Besides, in spite of the fact that some pupils are unable to read the book of religious education , yet it contains, in their opinion , some beautiful stories . The book of social subjects comes last because it is dull and does not include functional diagrams or information of interest to them in their life .

- According to difficulty , the subjects are arranged in the following descending order :

Sciences , social subjects , reading , arithmetic , religious education , and finally calligraphy and writing . Sciences come at the top of difficult subjects because they are explained — if at all — in an abstract way , without using apparatus or any equipment, for all one-class schools without exception have no lab equipment . However , pupils consider calligraphy and writing the least difficult subjects , because the lessons are usually either an imitation of calligraphy included in their printed textbook or seen dictation . In both cases , there is an opportunity for conducting the lesson according to the speed of each pupil . More often than not , the teacher of the one-class school leaves a group of pupils to study a seen dictation in a corner in the classroom , while he himself concentrates on explaining arithmetic , for example , to another group .

- According to the easiness the pupils find in the subjects , they are arranged in the following order :

reading , religious education , arithmetic , sciences , calligraphy and writing , and finally social subjects. It seems that this order is related to the interest of the teacher himself . Most teachers find reading and religious education easier to teach in class than other subjects . This indicates the necessity of concentrating in in-service training on sciences , calligraphy and writing and social subjects , so that the pupils' feeling of the difficulty of these subjects may be reduced .

- According to the desire of pupils to be distinguished in school subjects , these subjects are arranged in the following descending order :

reading , arithmetic , religious education , calligraphy and writing , sciences and social subjects. This order depends on many factors , including :

a) the extent of the teacher's concentration on each subject .

b) the extent of presenting the subject in an interesting way in the book .

- According to the best explanation of subjects , in the opinion of pupils , the subjects are arranged in the following descending order :

reading , religious education , arithmetic , sciences, social subjects , calligraphy and writing . It is the same descending order as that of the easiness the pupils find in the subjects , with the exception of the last two . This also emphasizes the necessity of concentrating in-service training programs on the last three subjects in this order .

- According to the fact that pupils are not afraid of examinations in certain subjects , these subjects are arranged in the following descending order :

reading , religious education , arithmetic , calligraphy and writing , sciences and social subjects. This confirms what we have mentioned before . Besides, the pupil is not afraid of being examined in subjects which he believes are carefully explained in class , or which he imagines he understands , which he likes to attend classes in , and in which he has good textbooks.

- According to the belief that the pupil is absent-minded when he attends classes in certain subjects , these subjects are arranged in the following descending order :

social subjects , arithmetic , religious education , sciences , reading and finally calligraphy and writing .

Social subjects , arithmetic , religious education come to the fore , because the teacher's method depends on spoon feeding , and sometimes narrating religious stories using a style of preaching , regardless of the abilities of young pupils .

The subjects which come last , require by nature , that the pupil should make a personal effort which occupies his attention and stops him from being absent-minded .

Hence , it is essential that we should look for a teaching technique that would occupy the attention of the pupil in every individual subject and at each level in one class , at the same time .

## A SUMMARY OF
## THE ATTITUDES OF TEACHERS , PARENTS , LOCAL LEADERSHIPS AND PUPILS TOWARDS THE ONE-CLASS SCHOOL

From the previous analysis of the attitudes of teachers , parents , local leaderships and pupils , it can be seen that there is agreement in more than one aspect , which is an indication that there are similar objective factors which influence them all, besides the existence of some contradiction as a result of the difference in the position and role of each class . In the following , we present a general review of the questionnaires on attitudes .

### First : The atitudes towards the importance of the one-class school

- There is unanimous agreement among the sample(100%) of teachers , parents and local leaderships about the importance of having the one-class school as the omly window for education in their small villages . Should this school be abolished , illiteracy would undoubtedly spread .

- Only 14.34% of the sample of pupils were proud of the one-class school . Besides, only 3.85% of the pupils feel happy when they leave this school for reasons not related to its importance but because of factores , including :

a) What some pupils of the one-class school have heard from their older brothers , or families about the advantages of the formal school because of having tables , chairs , blackboards , meals , etc ... , which they do not enjoy in their school , and which make them look forward to enjoying the paradise of the formal school as they imagine it .

b) Some pupils are fed up with squatting and the lack of feeling of comfort , when they write in the notebook.

c) The cruelty of a small number of teachers of the one-class school , prevents some children from liking their school .

Second : The attitudes towards Discipline in the one-class school

(1) The problem of differences in the age of pupils

- 30.95% of the sample of teachers believe they face moral problems because of the presence of grown up pupils side by side with young ones . However , 40.48% of the parents and 38.89% of local leaderships expected these problems . These percentages are near to each other and are not low , and this requires that the suggestions offered by the sample have to be taken into consideration . For example,

a) Older pupils should sit in one corner of the classroom , opposite to the younger ones .

b) An attempt should be made to develop the one-class school , inorder to consist of two classes : ône for the old pupils , and the other for the young ones .

- The percentages of teachers (69.05) , of parents (59.52) and of local leaderships (61.11%) believe that there should be no fear of any moral problems , for the old and young , the boys and girls , in the one-class school are often relatives and neighbours and live together whether inside the class or outside it.

(2) The unified school uniform

- 42.56% of the sample of teachers , most of the parents and 2.22% of the local laederships object to the unification of the school uniform , on the assumption that the poverty of families prevents them from buying two uniforms for the chidren . However , all of them welcome the unified uniform , if it is given free of charge, because it will be beneficial to their health , besides giving them a feeling of equality .

(3) Technical supervision (Inspection)

- 98.82% of the parents and 93.33% of local leaderships beleive that the presence of the supervisor (inspector) leads to serious commitment on the part of the teacher, improves performance in the school , and achieves control . This reveals the importance of limiting the assignment of the supervisor so as not to exceed 15 one-class schools , so that he may be able to visit every school twice a month at least . This would replace the big assignment exceeding fifty schools in the educational directorate in Fayoum , for example .

The role of the supervisor in improving the one-class school is essential , for he bears the responsibility of training and guiding the teacher who has not been prepared originally for this kind of schools.

(4) The length of the school day

- 78.57% of the teachers , 30.95% of the parents , and 23.33% of local leaderships object to the system of the long school day , which had been adopted by the old system of elementary schools (Katatib). The reasons given , include the following :

a) A young pupil cannot stand the effort of study for a whole day .

b) The techniques of the teacher and the possibilities of the poor school are not encouraging for working for a whole day .

c) Some teachers have commercial and agricultural commitments besides working at school . Therefore, she should have ample time to look after their interests.

d) Some parents and local leaderships believe that a teacher should not be overburdened , so that he may not desert his job or do it in a formal way .

e) Supervisors and section directors believe that according to the financial law , the maximum number of lessons given every month is 70 , at 20 piastres each . This is the limit of a school day , according to the law , and it cannot be changed unless the law is modified .

f) Some teachers state that they do not belong to the village , and have to walk for some kilometres every day to go home , and it is therefore impossible to lengthen the school day .

g) The pupils welcome lengthening the school day , on condition they are given the opportunity of practising some sports and hobbies , because squatting is rather tiring for them .

h) 71.43% of the parents believe that the morning shift is quite enough , if the teacher is dedicated, and if the possibilities of the school are improved by providing some seats .

(5) School Holidays

- 73.81% of the teachers believe that the attendance of the pupils is not regular on seasonal occasions . 66.67% of the parents believe it is important that school holidays should be linked to seasonal occasions. However , the percentage drops to 46.67% among local leaderships , and the common reasons given by them are as follows :

a) Children should join their families on seasonal occasions , in order to absorb their culture .

b) Some children undertake some roles on special occasions , such as participating in carrying eggs and poultry to be sold in the market , or serving tea to guests who come to visit the family on special occasions .

On the other hand , the reasons for disagreeing to the previous attitude , include the following :

a) Learning is the main jòb of the children .

b) Special occasions are meant for grown ups only .

- 80.95% of the parents believe it is essential to shorten the summer holiday . The percentage rises to 86.67% among local leaderships , and to 95.1% among pupils . The reasons for this are the following :

a) If holidays are shortened , the pupils will not forget their lessons .

b) Shortening the holiday helps some teachers to increase their income , because they are paid only for the classes they teach .

c) The pupils in areas where perfume plants or crops other than cotton are planted , do not have a role to play .

On the other hand , those who object to the shortening of the summer vacation , give the following arguments :

a) Summer is always associated in the Egyptian village with picking cotton or gathering some vegetables and fruits , such as :grapes , figs , tomatoes , etc... . These processes need the efforts of the pupils who can earn enough to pay for their clothing all the year round .

b) All teachers of one-class schools do other jobs , and need this long vacation to look after their interests , because the remuneration they get from a one-class school is not in itself adequate for a decent human life . In all cases , we should not be on the side of the majority in this research , for it is essential to study each environment independently , so that holidays in each school should agree with the conditions of the local environment , For example , areas in which perfume plants are grown , should have holidays in summer only , thus differing from areas in which cotton , fruit and vegetables are grown .

(6) Physical punishment in school

- 9.52% of the teachers believe that beating pupils is not a means for punishing and upbringing a child . However , the percentage rises up to 75% of the parents and then drops to 44.44% among local leaderships , and is almost nil among pupils .

These differences may be explained as follows :

a) Most teachers have acquired experience in reward and punishment from the field . They have noticed that beating a child may lead to his recession , or dropping out of school .

b) Since illiteracy has spread among the sample of parents (85.71) , and local leaderships (68.89%), we find that they practise beating as a means of upbringing , because they resent their illiteracy which has pushed them down to the bottom of Egyptian society . According to what they say , if they had found anyone to beat them with an iron rod , they would have been forced to learn .

c) Pupils object to the principle of beating as a means to impel them to learn . To illustrate , 12.94% of the sample are afraid of being asked by the teacher ; 16.08% of the sample are afraid to ask the teacher . These numbers are concentrated in schools in which there is a cruel teacher who never stops beating children , even when they show any inaccuracy in reciting songs , in reading , or in studying any lesson .

## Third : Attitudes towards the curricula of the one-class school

### (1) Promotion and public exams

- 71.43% of the teachers believe that the present examinations are suitable for promotion from one level to another . However , parents have all (100%) shown interest in the importance of their children obtaining a certificate , no matter how exams look like , for they have no idea about such exams . 70% of the local leaderships concentrate on the importance of giving a certificate after the exam . This shows how deeply examinations are associated with giving certificates , and the vocational prestige that follows obtaining such certificates .

This trend is still prevailing in the Egyptian society , in spite of the fact that the Central Agency for Organization and Administration has conducted intensive researches about specifying jobs , so that the certificate may be one of many factors qualifying a person for getting a job .

- Changing the attitude towards the value of the examination and the school certificate should not be the responsibility of educational authorities only , but should be related to the general Egyptian climate and its legislative and information authoriries .

(2) School activities

- Percentages amounting to 95.24% among teachers , 95.24% among parents , 82.22% among local leaderships, 59.09% among pupils are in favour of consolidating school activities , on the assumption that school activities as a means of education are not less important than reading , writing and arithmetic .

However , those who disagree , argue that the state does not recognize anything except succeeding in school subjects . Therefore , they look upon music , parties , sports and wall sheets , as sheer waste of time that would not realize the ultimate aim , namely , " the school certificate ". In order to change this attitude, the form of the school certificate has to be changed into a school record , including spaces for various activities practised by pupils , and these should have their weight in promotion from one level to another .

(3) The roles of the teacher in other areas than teaching in class

- In finding out the attitude towards the teacher undertaking some untraditional roles in the area of health enlightenment of pupils and their families , in improving social relations in the local environment , in modifying some old traditions in the local environment , in practising some entertaining activities , it has been discovered that there have been some differences , for the percentages of acceptance among teachers range between 69.05% and 100% , among parents between 25% and 100% , among local leaderships between 31.11% and 60% .

- Those who support the untraditional roles of the teacher in class , look forward to making of a school a source of irradiation in the local environment deprived of all service utilities , as revealed in the following chapter in studying the situation in three villages in which there are one-class schools .

- Those who object to the new roles of the teacher, believe that the possibilities and qualifications of the one-class school teacher are limited . Therefore , if he succeeds in teaching the children reading , writing and arithmetic accurately , he will have played his real role in a way for which he should be thanked .

(4) Pre-vocational education

- 61.90% of both the samples of teachers and parents believe it is essential to include in the curriculum technical and vocational aspects . This percentage rises to 74.44% among local leaderships . the arguments for this are as follows :

a) The wages of technicians are high , and pre-vocational education is considered a step towards becoming a professional technician .

b) Prevocational education may be a tool to make of traditional education something significant in the life of children .

- On the other hand , those who object to prevocational education , are still influenced by the philosophy of "white collars" , and the belief that verbal academic education is the road to a better life .

************

********

# CHAPTER SEVEN

## SUMMARY AND RECOMMENDATIONS

### Summary

- The subject and its importance
- Objectives and questions raised by the research
- Method and procedures
- General results.

### Recommendations

- Objectives and curriculum of the one-class school
- Textbooks
- Evaluation
- Teacher preparation and training
- Financial and administrative organization
- Looking ahead .

## SUMMARY AND RECOMMENDATIONS

### The Subject and its Importance

The issue of generalising Primary education and blocking the sources of illiteracy is one of the most pressing problems in Egypt . It is , therefore , essential that untraditional techniques should be used to cope with it .

- In the year when this research was conducted (1979/80), 159,850 children of compulsory school age (6-8 years) — representing about 16.9% of the children of that stage — were unable to join any primary school .

- Besides , 209,890 pupils (representing 5% of the total number of enrolment in primary education , which amounts to 4,211,345 school boys and girls) , dropped out from primary schools and did not continue education , and have most likely joined the army of illiterates .

- Those are added to the existing number of illiterates, amounting to about 15,690,000 male and female citizens.

The one-class school is one of the approaches encouraged by the state to contribute to solving the problem of generalizing primary education and blocking the sources of illiteracy . The role it plays may seem to be small , if we know that the regular number of pupils was 66,333 in the year 1979/80 , when the research was conducted , that is to say , catering for not more than 1.5% of those enrolled in primary education . However , this interpretation in applied fact does not represent the actual role of the one-class school in the environments it serves , for it is found in deprived areas far away from centres of educational services , and it plays its role in small inhabited areas , which may be a hamlet or a small village including about five hundred persons , of whom about 45 children are of compulsory school age , and there is no channel through which they can get educational service except through this type of school . Should it be cancelled , these environments would be left completely deprived of any kind of education .

The one-class school is a type of educational system parallel to formal education , but it has its private identity , which is in keeping with the conditions and needs of the environment in which it is established . This school offers its services to groups of children of different ages and educational levels , learning under one roof and taught by one teacher .

## Objectives and Questions Raised by the Research

We have to take for granted the fact that the objective circumstances facing the Egyptian society and its educational system make it essential to adopt the formula of the one-class school for a period which may be long, until it can create a better formula for spreading education in small inhabited areas which have been deprived of all regular educational services so far . Thus , this research undertaken by the National Center for Educational Research , in collaboration with the International Development Research Center (Canada) , aims at :

1) Determining the extent of the effectiveness of the one-class school .

2) Finding out the obstacles to the returns expected from this school .

3) Offering realistic suggestions to upgrade its performance and increase its effectiveness .

In order to realize these objectives , the research attempted to answer the following two main questions:

(1) What is the present situation of the one-class school, concerning : material and human possibilities , the standards of learning among its pupils , and the attitudes of teachers , parents and local leaderships towards it ?

(2) How can the effectiveness of the one-class school be increased , in order to achieve its objectives ?

## Method and Procedures

In order to answer these questions , the following procedures have been followed :

### First : Constructing the Research Instruments

Concerning this step , the following research instruments were constructed :

(1) A rating card to rate the school and the teacher ,

with the aim of finding out the existing situation and possibilities , in the hope of improving them .

(2) Setting questions to find out the standard of learning of religious culture , and relating it to other school subjects , so that the pupils may not answer according to what they have learnt by heart , but to what they have absorbrd concerning values derived from holy books .

(3) Tests to measure the standard of learning Arabic (reading and writing), arithmetic and geometry, scientific culture and social culture with the aim of evaluating the standard without bothering about who has succeeded or who has failed . Therefore , questions were graded spirally in the light of educational objectives , which agree with stages of growth of a child , the nature of the subject , and the requirements of society .

(4) Questionnaires to find out the attitudes of teachers, parents, local leaderships and pupils towards the one-class school . Wording is such that the answers may serve to improve the one-class school concerning its system, curricula and role in the environment.

The construction of all these instruments passed through the following stages :

1) Giving general instructions by the director and consultants of the research in a workshop which was designed specifically to plan the framework of the research . The workshop included all the specialists in constructing tests of all types .

2) The specialized working groups made a tentative design of the instruments .

3) The workshop discussed this tentative design to introduce necessary modifications .

4) The final wording and trial were carried out in the case of the rating card for the one-class school .

Concerning the other instruments , they were tentatively worded for piloting .

5) The researchers tried the instruments in Bein El Bahrein school at Guiza Governorate , then tried the tests for measuring standard in the formal primary school of Alam El Din only,in Cairo.

6) Modifications were introduced in the light of the pilot trial , and the final form of each instrument was made, as seen in the appendices of the research .

Diversification of Teachers' Qualifications

a) There are schools in which educationally qualified teachers teach .

b) There are other schools in which the teachers hold subject-matter qualifications , but no educational ones.

c) In the third type of schools , there are teachers who have no qualifications at all .

## Third : Administering the Research Instruments

- The preliminary rating card was administered in November, 1979 to 38 educational leaders responsible for the follow-up and evaluation of the one-class school . The data helped to determine the sample and throw light on the actual situation of the one-class school .
- The two cards for the school and the teacher were administered on the sample of 40 schools , during March 1980.
- The tests for measuring the standard of education were administered in the 40 schools , besides five mother formal primary schools in March 1980. The respondees amounted to 858 pupils in the one-class school , and 150 pupils in mother formal primary schools .
- Questionnaires for finding out attitudes were administered

in the villages of the sample of forty schools , where every one who could read and write had to answer the relevant questionnaire . Besides , teachers and about three of the parents and local leaderships , as well as ten of the oldest pupils enrolled in the school responded. The questionnaire was changed into an interview form in the case of the illiterates who could not read and write well .

- A card for case study was administered in a one-class school , in May , at three different villages :
a) El Haddadin , as a model of a hamlet which is somewhat economically prosperous .
b) El Dokary , as a model for a hamlet which is economically poor .
c) Mahmoud Abdel Baky , as a model of a hamlet which is extremely poor , and in which there are no educated females , or enrolled in a one-class school .

## General Results of the Research

Administering the above-mentioned instruments on the sample , has provided data which could answer the first question of the research , mentioned in Chapter One and related to the existing situation of the one-class school , concerning material and human possibilities, standards of learning of pupils and attitudes of teachers, parents , local leaderships and pupils towards the school.

The results are as follows :

## First : Concerning the Results of Studying the Existing Material and Human Possibilities of the One-Class School

### Building and Equipment

The building consists merely of four walls with a simple roof or without any . The children sit on mats or on the ground (in 84% of the sample of schools). There are no apparatus and equipment except for a blackboard in each one . Besides , 52% of the schools are in mosques . This puts some restrictions on providing these schools with any educational instruments.

### Plan and Curriculum

In a one-class school , the curricula of a formal primary school in religious education , Arabic , arithmetic , sciences and social subjects , are applied . Besides , the same textbooks of the formal school are used in the one-class schools , despite the fact that the plan of a one-class school is reduced to one half every week , for it does not exceed 16 classes , distributed as follows : 5 classes for Arabic , 5 for arithmetic and geometry , 4 for religious education , and one class for each of sciences and social subjects. The classes for physical / art / agricultural education for boys , and home economics for girls , have all been abolished . Besides , there is no educational activity outside the area of teaching inside or outside the four walls .

## Admission System and Examinations

A new pupil is admitted into the educational cycle suitable for him in the light of a quick formal test . Besides , a pupil is promoted from one cycle to another after succeeding in an exam held in February or May every year uhder the supervision of the mother formal school or its representative . A pupil in a one-class school may apply for the Primary Certificate exam after paying a fee of two pounds . Besides , a pupil enrolled in a one-class school can be transferred to a formal school, if he succeeds in a quick admission exan , set by the headmaster of the school to which he is transferred , provided his age is suitable for the grade which he joins. This means that there are open channels between the one-class school and the formal primary or preparatory schools .

## The Teacher

- 30% of the sample of one-class schools have teachers who are educationally qualified , while 57.5% of them have intermediate qualifications , and 22.5% have no qualifications at all . The educationally qualified were originally prepared for formal schools . Most of the holders of qualifications work temporarily in the one-class school until they are appointed in jobs which agree with their qualifications . On the other hand , most of the unqualified teachers look upon the school as a source for increasing their incomes . All this emphasizes the need for a way for preparing a teacher specialized for this formula of education and for training those who are actually doing the work .

- The primary stage supervisor and the headmaster of the mother school or his representative supervise the work in the one-class school . However , such supervision is often formal because of some reasons , such as : the big assignment of schools (fifty) under the supervision of a supervisor , besides the increasing responsibilities of the headmaster of the mother school, in addition to the fact that the roads are very rough, and it is not easy for anyone to reach most of these schools .

- All the teachers of the sample do other jobs besides teaching , for the average salary paid by the one-class school to the teacher does not exceed 14 Egyptian pounds, at a rate of 20 piastres for a clss , provided the number of these classes should not exceed 70 classes a month . Undoubtedly , the fact that the teacher does not have a full time to teach reflects negatively on the standard of learning at school .

## Second : Concerning the Results of the Study of the Standard of Learning School Subjects

1) The standard of learning religious culture at the

one-class school is higher than that of the mother formal school , because of reasons including the fact that religious culture may depend on stories or speech, which are all interesting to the pupils . Besides , the fact that the pupils live in a small populated area , in addition to family relationships among them , motivate them to acquire principal religious concepts , such as : jealousy , faithfulness , giving and taking , and justice . It has also been noticed that they have a higher standard than their colleagues in the formal school in studying and reciting verses from the Koran as well as the Prophet's quotations .

In other subjects , however , it has been noticed that the standard of the pupils is lower than that of their colleagues in the mother formal school , because of some reasons , including the following :

a) The teacher of the one-class school who is educationally qualified , follows the same techniques used in the formal school in which the class includes a group of pupils who are educationally homogeneous . However, the other teachers who are educationally unqualified follow techniques of spoon-feeding , memorization and reciting whatever could be learnt , according to the abilities of the children .

b) Using the same textbooks used in the formal schools , despite the fact that the standard of the teacher in the one-class school is scientifically , professionally and culturally lower .

c) The weekly study plan is reduced to about one half of that in the formal school .

d) It is difficult to teach to more than one educational standard at one place and at the same time .

e) Educational supervision , guidance and follow-up in the one-class school are much less than those in the mother formal school , for many reasons including the roughness of the road leading to it , and the lack of public means of communication .

(2) There is relation between the standard of the pupils' learning and the degree of qualification of the teacher teaching them , in favour of the teacher who is educationally qualified , and the one who has a subject-matter qualification . This emphasizes the

importance of preparing and qualifying the teacher who teaches in this kind of school .

(3) There is a relation between the standard of the pupils learning and the number of cycles in one class, for the smaller the number , the more effective the learning .

Anyhow , regardless of the various factors affecting the standard of learning , and disregarding the result of comparing this standard with that of the pupils of the formal primary school , the results of the research indicate that the one-class school actually teaches the pupils , and its role in this respect cannot be ignored, especially so long as it is at present the only channel that undertakes educating the children in these areas where this school is found . This confirms the main principle on which the research is based , namely , the necessity of keeping this kind of school at present , and attempting to upgrade its efficiency .

## Third : Concerning the Results of Studying the Attitudes of Teachers , Parents , Local Leaderships and Pupils Towards the One-Class School

(1) The Importance of the School

The subjects of the sample unanimously agree that the existence of the one-class school is considered essential for the local environment , for it is the only irradiating spot which spreads out the light and enlightenment to all areas of the local environment .

(2) The General System of the School

a) 33% -- 79% of the sample object to increasing the number of classes in the present plan (16 classes), because this contradicts their personal interests . On the other hand , those who agree like to raise the standard of teaching , provided necessary conditions are made available to them to enable them to implement the plan of study during a whole day , such as : offering a meal , raising the teacher's remuneration , so that he may devote all his energy to teaching , besides introducing some activities , so that the pupils may not remain squatting all day .

b) 81%-- 95% of the sample agree to shortening the summer vacation , for this increases the financial remuneration of the teacher , besides raising the standard of pupils who stay without doing any work in areas where perfume plants are grown , and where crops not requiring their effort are grown .

On the other hand , those who disagree believe that the extra work done by the teacher outside the school requires some free time . Besides , the pupils work in combating agricultural pests and in gathering crops in return for rewarding wages , if they are in areas where cotton and summer fruits are grown . This is an indicator of the necessity of linking the school to the conditions of the environment and of not subjecting it to general rules governing the school system in formal schools .

c) 93% -- 97% of the sample believe that learning in the one-class school is regular and is more controlled on the day the supervisor is present . Even the villagers feel the presence of the supervisor , when the pupils start reciting some songs .

This signifies that this kind of school is in need of more orientation visits , and of more links with the supervising educational administration .

d) Despite the fact that 30% - 40% of the sample of teachers , parents and local leaderships do not feel happy about the presence of young children side by side with grown ups in the one-class school , because of the possibility of its effects on behavioural aspects , yet the majority of the sample believe that the pupils of the one-class school have family relations that tie them together outside the school , and therefore there are no fears about being together on the premises of the one-class school .

e) 2% - 43% of the research sample object to the idea of a unified school uniform , for this would put some burden on the poor families . However , these people join those who are in favour of a unified uniform , if it is to be distributed free of charge .

f) 70% - 100% of the sample believe it is important to give certificates to the pupils of the one-class school just as those of the formal schools . However , the majority who disagree , are more interested in the content of enlightenment and education regardless of any school certificate .

## The School Curriculum

a) 59% - 95% of the sample are in favour of adding school activities , for they are an important educational means . However , those who disagree believe that the function of the school is to teach lessons which make it possible to obtain a school certificate.

b) 62% - 74% of the sample believe it is important that the curricula of the one-class school should include preparatory aspects for vocational education , because of their benefit for developing favourable attitudes among pupils towards respecting manual work, besides being a step towards getting a profitable job.

On the other hand , those who object are still influenced by the philosophy of "the white collar" and the prestige of the ancient Egyptian Scribe (writer) , who was held in high esteem in the ancient Egyptian society .

## Fourth : Concerning the Results of the Case Study of Three Villages including One-Class Schools

(El Haddadin, El Dokary, and Mahmoud Abdel Baky) in Fayoum Governorate, and the Role this School can Play in Raising the Standard of Living in the Environments where it is Found.

The aim of this survey, demographic, economic, cultural, etc ... study, has been to find out the role such a school could play in poor environments.

## Environments Characterizing the Three Villages

- There are no public means of communication to link them with neighbouring towns.
- The area of cultivated land ranges between 60% and 100% of its area amounting to 250 -- 600 feddans, and most adults work as hired farmers.
- There are 36 - 55 houses in each village, including 500 -- 600 inhabitants.
- The three villages are totally deprived of public utilities such as combined unit, agricultural unit, medical unit, police station, fire-station, agricultural co-operative society or schools other than the one-class school established by private efforts of the villagers.

- All of them belong administratively to villages , and are 8 - 15 kilometres away from them .

Demographic Conditions

- The rate of increase in population (in 1970 - 1980), ranges between 2.3% - 2.8% .
- This means constant increase in population and the new children of school age in each village will amount, after six years , to 45 - 60 children to be added to the stock of illiterates accumulating one year after the other , unless there is expansion in the number of existing one-class schools .

Social Conditions

- There are no projects to raise the standard of any of the villages . Even the one-class school undertakes education only inside its walls without extending it to serve the local environment .
- The people look upon education as a means for males to obtain a certificate and then find a job . However, the main aim of educating females is to prepare a housewife in the first place , and then to earn a living and find a job .

## Economic Conditions

- There are no advanced environmental industries or trades , such as bee-keeping . This reveals their need for a kind of education related to such fields.
- There are usually poultry breeding and practising some primitive dairy industry , with the aim of selling them in order to use the price to purchase clothing and food . Such aspects would serve as approaches to combat vocational illiteracy in these environments .
- Fruit trees are not planted in the three villages . However , there are crops which , from their point of view , are contradictory to suitable time for learning . Therefore , the school time should not contradict with the need of the environment for children to work in combating agricultural pests , and in gathering crops in return for rewarding wages .

## Health Conditions

- Eye diseases spread everywhere , besides the lack of bathrooms in any of the houses .

- The popular food in these villages includes wholemeal bread , pickles and very old salty skimmed milk. All this emphasizes the importance of health education which should keep pace with economic and social activities .
- Patients go to doctors and use medical chemicals for treatment whenever available . However , they use popular prescriptions or zar (monotonous music), if they cannot have access to a doctor in the mother village, which is 8-15 kilometres away . This justifies the importance of scientific education for the children of the one-class school .

Recreational , Cultural and Educational Conditions

- The people have established one-class schools in their villages , and they include at present 24%-40% of the children of compulsory school age .
- A project for adult education for males was started in the one-class school building at the hamlet of El Haddadin (in 1978-79), and was cancelled at the end of the same year , because of the irregular attendance and professional inefficiency of the teacher .

- The school at Mahmoud Abdel Baky hamlet is suitable as a cultural and recreational center because it is annexed to a mosque , whereas the schools at El Haddadin and El Dokary are not suitable , because they occupy mosques which have their holiness . Therefore , these schools cannot be provided with educational media and sports equipment .

- One or two newspapers may occasionally reach the village and are read only by those who buy them ,

- There are radio or transistor sets amounting to 25-70 sets in each village . There is also a TV battery set at El Dokary village , thus providing an opportunity for general culture and enlightenment .

Needs of the People of the Villages

a) Education should be linked to some industries and trades which invest their environment . In this way , education for the young and old would be a means for fighting poverty in which they are living .

b) Appointing a qualified efficient teacher for the one-class school , on condition that he should live in the village , because living together is a means of upgrading the efficiency of education .

c) Establishing some service utilities financed from public money , because education only cannot satisfy the needs of development and progress in these environments .

## RECOMMENDATIONS

In the light of the previous results which answered the first question in this research , concerned with investigating the existing situation of the one-class school , some recommendations may be offered to provide an answer for the second question concerned with the means whereby education in the one-class school may be improved and become more effective according to objective factual data .

### First : Concerning the Objectives and Content of the Curriculum in the One-Class School

There is a desire to upgrade the educational standard in these schools , so that it may be equivalent to the curricula of formal schools . However , the objectives and content of the one-class school curriculum have to be distinguished . Therefore , we recommend the following:

## (1) Concerning Objectives

It is recommended that one of the objectives of the curriculum in the one-class school , should be serving the local environment , that is , it should become a school for the environment . It is not feasible that its role should be limited -- like the formal school -- to spoon-feeding , memorizing and reciting the lessons without having any direct effect on their life . The one-class school should even be a social institution which aims at developing the local environment , besides developing the pupils . Childhood , life , adjustment and growth should be centres of interest in this school . Activity and practice in social life situations should be means to help develop the village .

Since the one-class school is almost the only public utility in its local environment , it can offer activities and services to parents to contribute to the solution of some health , recreational , economic and social problems in such a way as to change some attitudes and traditions which may hinder raising the standard of its environment which is lonely and deprived of services.

Besides , the one-class school may contribute to the adoption of some useful projects for its environment , such as the productive families project , and training on some trades which invest some possibilities of the environment such as needlework , tricot and agricultural industries .

## (2) Concerning the Content of the Curriculum and its Relation with the Environment

In order to realize these objectives , it is suggested that the curriculum should be based on integrated subjects around which the skills and knowledge of the school subjects should gather . For example , the content of the curriculum should be linked to the demographic, social , economic , recreational and general cultural conditions in the local environment , so that the aim may be to develop the local environment through developing its individuals .

In a desert environment , the approach to the teaching of reading and writing , for example , could be discussing ways of life of the bedouins and methods of urbanizing them .

The approach to the teaching of arithmetic and geometry could be defining the dimensions of areas that could be reclaimed , and estimating the amounts of water necessary for irrigation and the amounts of fertilizers to enrich them .

The approach to scientific and health education could be how to protect the individual's health from desert climatic changes and combating sand insects.

The approach to social education could be how to change the prevailing tribal ways to urbanization .

In the south of Egypt , the content of the curriculum could be linked to crops and some medical herbs common there , which are used as medicines for coughs and colds, for hypertension , and acidity .

In coastal environments and villages overlooking canals and drains , the curriculum content could be linked to fishing , preserving fish through salting or drying it and using it as a white protein in wholesome food .

In garden environments , such as some villages in Mansourah , Kaliubia and Fayoum , the curriculum content should be different from that of crop environments such as some villages in Beheira and Kafr El Sheikh . In the former , the approach to education could be estimating the quantities of fruits , how to pack , market and preserve them . In the latter environments , the growing of cotton , rice and barley , and protecting them from pests , gathering and marketing them , could be the approach to education .

In fact , developing the content of the curriculum in this way , links the pupil of the one-class school to his environment , so that he may himself grow and develop and upgrade his environment . This is an application of an essential principle , namely , that "man is the centre and driving power of development" .

### (3) Concerning the Content of the Curriculum and its Relation to Integration

The present curriculum of separate school subjects in use now , is not suitable for the one-class school, because it requires a weekly plan not less than (28-32 classes ) as adopted in the formal schools . Besides , prescribing the same textbooks makes it difficult for the teacher to continue teaching efficiently , while using six textbooks for one school subject .

Therefore , the syllabus of the first two cycles should be integrated in such a way as to adopt the approach of concepts or of problems . If the approach of the concept of "Know your body" is adopted , the teaching of reading and writing will be through health subjects , and the problems of arithmetic will be linked to the amounts of air necessary for healthy breathing, and the food necessary for the individual .

Besides , social subjects will deal with the relations that affect self protection . Religious education will also be related to concepts of human relations and the importance of altruism for self protection .

If the problem of "Upgrading the local environment" is adopted as a general problem , this will mean raising the problems of the environment which are related to its demographic , social , economic , recreational and cultural conditions and studying all this through practice and activity through learning reading , writing , arithmetic, geometry , scientific culture , and the included moral aspects , besides absorbing values derived from holy books through all practices .

## Second : The School Textbook

It has been revealed in this research that the pupils of the one-class school use the textbooks prescribed for the pupils of the formal school . Therefore , there are in one class 28 books at the same time : 6 books for Arabic , 6 for arithmetic and geometry , 6 for science and health , 4 for social studies , and 6 for religious education . This makes the process of teaching rather difficult . Therefore , we recommend prescribing one book for the first cycle , one for the second cycle including paragraphs of the syllabus in an integrated form , so that the framework of the subject matter for both books may be paragraphs of the tests in reading (1), writing (2) , and arithmetic and geometry (3) applied in this research , for they are graded tests and measure the standard of learning with great accuracy . Integrated with these paragraphs , there may be some scientific , health , social and moral information suitable for the stage of maturity of the pupils , and the nature of the subject , besides the findings revealed by the tests of scientific , cultural and social standards , included in the previous Chapter .

---

(1) See Appendix 4

(2) See Appendix 5

(3) See Appendix 6

Concerning the third cycle , there should be two books only :

First : One for Arabic , scientific and social culture as well as moral culture , derived from religious books , so that they may be integrated and interwoven.

Second :The other one mainly for arithmetic and geometry and inserting some physical sciences , such as the law of levers .

Implementing this recommendation , will lead to the reduction of books circulated inside the room of the one-class school to 4 instead of 28 books .

Third: Teacher Preparation and Training

Neither the curriculum , nor the recommended text-book is of any value , unless there is a teacher who is excellently qualified in such a way as to be suitable for the conditions of the one-class school .

The role of the teacher becomes of great importance, because of some considerations , including the following:

- He is the only teacher in his school , whereas in the case of a formal school , there is a group of teachers who are of various capabilities which complement each other.
- He is a teacher who undertakes teaching in the six grades at the same time , whereas , the class teacher of the formal school teaches the first four grades , while subject matter teachers teach at the fifth and sixth grades . Therefore , we recommend the following :

(1) Creating a new department (The One-Class School Teacher) in the teacher training institutes , or at least setting a special program to prepare all students at the teacher training institutes to teach in the one-class school , where emphasis in preparing the student should be on the following :

- How to teach more than one educational level at the same time in one place , such as acquiring the habit of giving a group of pupils an assignment of writing a seen dictation . Meanwhile , another group undertakes doing exercises and solving arithmetic problems , while the teacher is conducting a discussion with a third group of a topic in social subjects .

- How to benefit from some types of educational technology , such as cassette tapes used with an apparatus that is worked by battery , for it is well known that one of the definitions of educational technology is that it is a means that would undertake some roles of the teacher . And that is what distinguishes it from visual educational aids which help the teacher in doing his job . If there are many cassettes on which some lessons have been recorded , the tape recorder will be considered a substitute for the traditional definition that used to aid the teacher of the textbook .

- How to provide for the children's participation in the activities of his environment , such as :

  ** Collecting geograpnical information about the place.

  ** Benefiting from the religious preacher of the village , or one of the educated people therein by giving him the assignment of conducting a discussion with the children of a cycle on a subject included in the curriculum .

** Collecting samples from the environment , such as leaves , feathers , stones , seeds , ... and classifying them in a notebook or a cardboard box , in a scientific way . Every pupil will write his personal notes and observations under each one of the samples , concerning the date of obtaining it , morphological description , how to preserve it , its function , etc... and continue recording his observations of what occurs to them .

** Collecting beliefs of the villagers from what they say and do , especially in the areas of health , food , recreational and moral customs , then , holding seminars in which the pupils , the teacher and some villagers participate in order to find out the rationale behind such beliefs . This research has revealed that the villagers always justify their beliefs and resent any sudden attack on them . However , they may come to believe in opposite ones , or modify , cancel or change them in the course of the discussion .

- To study both theoretically and practically methods of vocationalizing the syllabus of the one-class school . He will thus learn different approaches by treating any topic in the syllabus , and then actually practise these approaches during practice teaching , whether these approaches are environmental , narrative or functional, .. .

- Participating with pupils and parents in some agricultural processes in seasons of cultivation , irrigation and harvesting .

- This research has revealed that the teacher coming from another village is less productive than the one belonging to the same village . Therefore , it is recommended that some members of the small inhabited areas where there is a one-class school , should be encouraged to join the teacher training institutes usually found in the capitals of the governorates , and the expenses should be met by local authorities until these persons graduate and undertake the work in their village school .

(2) In-Service Training of the Teacher

Since the implementation of the previous recommendation related to teacher preparation may take not less than five years , it is therefore recommended that an effective in-service training should be organized for the personnel actually working in the one-class school to achieve the following objectives :

Academically

Increasing the information of the teachers and intensifying the subject they are teaching to the pupils of the one-class school .

Culturally

Developing their knowledge of the importance of the one-class school and the roles they have to play .

Professionally

Helping them to acquire skills , interests and attitudes related to treating children and how to give them all various assignments at the same time . Training could be conducted through the two following techniques :

a) Lectures , seminars and discussions . This should be within very narrow limits , because this research has revealed that the teacher soon becomes fed up with this kind of training which forces him to go to the capital of the governorate or to town where he has to spend some days during which he spends more than he can afford.

b) Meetings on the premises of the one-class school. These should be the basic technique of training , whereby the supervisors and headmasters of the mother schools or their representatives hold periodical meetings with the teacher and guide him during his work on how to use more effective techniques and provide him , through loans or ownership , with some books that would intensify his understanding of the subject or that would provide him with general culture to help him in his work, or that would upgrade his professional proficiency . Then, the teacher would be asked to summarize these books and write reports on them .

We also recommend that there should be an adequate guide that would derive most of its paragraphs from tests of the standard of learning used in this research . Every teacher should be asked to present other examples and techniques on the basis of this guide or taking it as a starting point .

## Fourth : Financial and Administrative Organization

This research has revealed that the present financial and administrative organization has had a negative effect on motivating the teacher to make an effort as well as motivating the supervisor to attempt regular follow-up , caring for pupils and consolidating the material possibilities of the school . Therefore , we recommend the following :

### (1) Concerning the Teacher's Salary , incentives and Follow-up

- This research has revealed that all the teachers of the sample are not full-time teachers in the one-class school , for everyone of them is doing other jobs that may add to his income in order to enjoy a decent life . We , therefore , recommend that the teacher should do a full-time job in this school . Hence , remuneration for every class he teaches should be doubled while increasing his teaching load from 16 to 22 classes per week , in order to cover the curriculum and at the same time to increase his income . There should be no limits to the monthly remuneration .

- This research has shown that the teacher goes to the mother school more than once during the first two weeks of the month to get his remuneration . Therefore , we recommend that the supervisor responsible for the follow-up of the one-class school should visit it once a month at least , in order to calculate the required remuneration for every limited period and pay it off at once , This financial aspect should coincide with the technical work of the supervisor . This requires reducing the assignment of the supervisor to not more than fifteen one-class schools (instead of fifty), so that he may perform his financial and technical roles in a reasonable way .

- This research has revealed that the supervisor responsible for El Haddadin school at Fayoum has a motor cycle , which enables him to pay frequent visits to the school , which has actually led to raising the standard of its pupils .

We therefore recommend that every supervisor should be provided with a bicycle , so that he may be able to follow-up , evaluate and guide the work in the one-class schools adequately , especially that most of them are away from public roads and beyond the reach of public means of communication . Sometimes , the road leading to the school may not be more than 80 cm wide , and may extend for many kilometres .

- We recommend that the teacher of a one-class school should be allowed to fix teaching time , and the times of holidays , according to the needs and conditions of the local environment . Besides , financial considerations should not be a hindrance to the extension of the school year more than eight months .

(2) Concerning Pupils' Care

- We recommend distributing the school uniform out to all pupils of the one-class school , free of charge , because this research has proved that it is a common request made by all parents of the pupils of these schools.

- The pupils in deprived areas suffer more than their colleagues from mal-nutrition . This research has revealed that some mother formal schools offer meals to their pupils , consisting of : bread , cheese and halawa tahinia (a special kind of processed seasame and sugar , used as food) , whereas the affiliated one-class schools are deprived of these meals because of the roughness of the roads leading to them , and the reluctance of food contractors to take the trouble of supplying them with meals .

Therefore , we recommend the following :

a) That the food offered to the pupils should not consist of the above-mentioned kinds , which are liable to be contaminated , but the pupils should be provided with pies including carbohydrates , proteins , vitamins, etc.... , and should be packed in plastic bags . It is worthwhile mentioning that there are some successful Egyptian experiments in this respect .

b) That the food contractors when concluding agreements should undertake delivering the share of food due to the one-class school in the same way as they do in the case of mother schools .

- We also recommend that the pupils of one-class schools should be exempted from fees paid when applying for doing the Primary Stage Certificate exam . The state should also offer a financial grant to every pupil who applies for the examination to get this certificate , in order to meet the transportation expenses required for travelling to the examination centre at the mother school which is usually some kilometres away from the one-class school .

- This research has revealed that the one-class schools are found in environments where illiteracy , poverty and disease prevail . We therefore recommend that the state should encourage some pupils of these schools who obtain the Primary Certificate , and help them financially and technically in other educational stages to become qualified as leaders of rural development in their environments . Some of them will join teacher training institutes to become teachers in the one-class schools in their areas .

(3) Concerning Material Support of the School , we recommend :

- That providing the one-class schools with blackboards, seats , and cabinets for keeping school records and simple educational aids , should be compulsory for every educational administration .

- That local raw materials should be used together with private efforts , so that a room amy be built and roofed with palm tree trunks and trees , in order to become an independent one-class school , attached to a mosque , instead of the existing schools which use the mosque itself as a school , so that the school may be free to perform its tasks , because the holiness of the mosque may be a hindrance to practising some school activities .

Fifth : Concerning Evaluation , we recommend :

- Using the tests for measuring the standard of learning adopted by this research , as a means to evaluate the standard of every new pupil so that he may be placed in the cycle suitable for his standard , and for being promoted from one cycle to the following one .
- That the evaluation of a teacher should be linked to the results of the pupils who succeed in the exam , and some incentives should be given to the teachers who prove to be efficient in their work .
- Evaluation should be carried out according to an objective checklist , and its items should be discussed as a kind of self instruction and training .

- One of the aspects of teacher evaluation should be how far he keeps systematic records of the pupils attendance and absence and follow-up of their achievement , as well as his lesson preparation notes .

Sixth : Looking Ahead

The efforts exerted in planning this research , the scientific approach followed in implementing its procedures , the results arrived at and the recommendations suggested , all help to look ahead and suggest the following :

- Holding a conference comprising the leaders of primary education , literacy campaigns , social service and social work , as well as economists and mass media personnel, to study the subject of "The integration of social , economic , cultural and educational efforts to develop local environments in Egypt through the approach of education" .

Our present research will serve as a stepping stone for the conference members to define the form of this integration , because the research has revealed that education can not be the only means of civilizational progress , especially in environments below poverty line, where most of the one-class schools are established .

- Undertaking researches in the following aspects :

a) Preparing and training the one-class school teacher.

b) Textbooks and curricula of integrated subjects of the one-class schools .

c) Training the supervisors responsible for the work in the one-class school .

d) The environment school and its roles in local societies.

e) Educational technology which helps in upgrading the efficiency of teaching in the one-class school .

***********

******

## BIBLIOGRAPHY

Besides the extensive field study in areas of the sample schools (forty) , the researchers have referred to the following references :

(1) The General Program of Education (1978/79) -- A Seminar on the One-Class School . (Cairo , The Arab League Educational , Scientific and Cultural Organization , 1979) .

(2) The Report of the National Council for Education , Scientific Research and Technology. (Cairo , The Specialized National Councils -- Fifth Session , 1978) .

(3) The Ministry's Follow-Up Report on the One-Class School , in 1975/76 -- 1976/77. (Cairo , Ministry of Education , 1977) .

(4) The Workshop for Preparing the Guide for the One-Class School , Held on the Premises of the Educational Professions Syndicate at Gezira . (Cairo, The General Department for Primary Education, 1975) .

**********

****